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 FILE LAST UPDATED: 25 Feb 2009 (20090225/ED)

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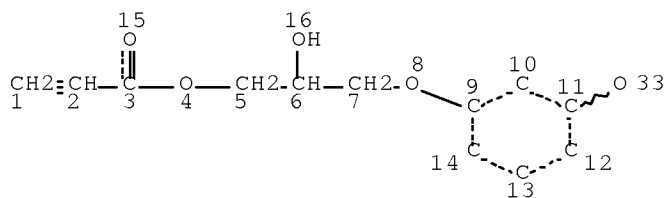
<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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 L41 STR



NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
 RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE
 L43 95 SEA FILE=REGISTRY SSS FUL L41
 L48 53 SEA FILE=HCAPLUS ABB=ON PLU=ON L43
 L49 70964 SEA FILE=REGISTRY ABB=ON PLU=ON CARBAZOLE

L50 57372 SEA FILE=HCAPLUS ABB=ON PLU=ON ("POLYMERIZATION CATALYSTS
(L) PHOTOPOLYMN."/CV OR "POLYMERIZATION CATALYSTS (L) PHOTOCHEM
." /CV) OR PHOTOPOLYMERI? OR POLYMERIZ?(L)PHOTO?
L51 204364 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR ?INITIATOR? OR
?CARBAZOLE? OR L49 OR CARBAZOLE/CV
L52 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 AND (L50 OR L51)
L53 34265 SEA FILE=HCAPLUS ABB=ON PLU=ON ("SEALING COMPOSITIONS"/CV OR
"SEALING COMPOSITION"/CV OR "SEALING MATERIALS"/CV) OR
?SEALANT?
L54 207950 SEA FILE=HCAPLUS ABB=ON PLU=ON "LIQUID CRYSTALS"/CV OR
LIQUID(W)CRYSTAL?
L56 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L53 OR L54)

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=> d ibib abs hitstr l56 1-11

L56 ANSWER 1 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:547732 HCAPLUS Full-text
DOCUMENT NUMBER: 141:113994
TITLE: Cellulose acylate cast films, their manufacture, and
optical films, photographic films, and liquid
crystal displays therewith
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 42 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004188679	A	20040708	JP 2002-357248	20021209
PRIORITY APPLN. INFO.:			JP 2002-357248	20021209

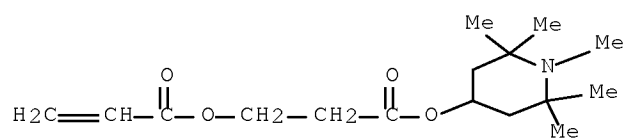
AB The films are cast products of cellulose acylate dopes containing radical
monomers and photothermal-converting polymerization initiators Dn-(K+)n (D =
anionic group-containing near-IR-absorbing dye; K+ = onium ion; n = 1-4).
Photog. films having supports comprised of the cast films with 30-250- μ m
thickness, optical films, and LCD having the cast films are also claimed.

IT 718640-46-1P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material
use); PREP (Preparation); USES (Uses)
(high-durability cellulose acylate cast films for photog. film
supports, polarizer protective films, and LCD constituents)

RN 718640-46-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, cyclooctylmethyl ester, polymer with
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate,
2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-
oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and
3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate
(9CI) (CA INDEX NAME)

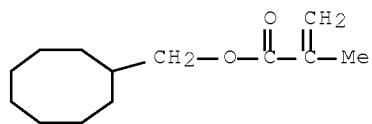
CM 1

CRN 658059-90-6
CMF C16 H27 N O4



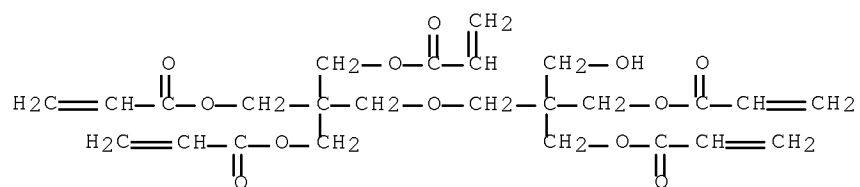
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CMF C13 H22 O2



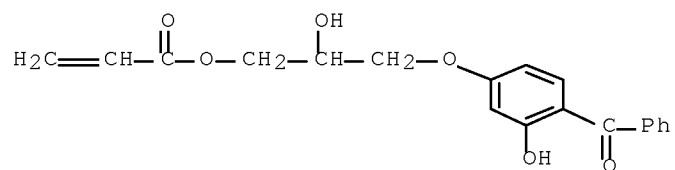
CM 3

CRN 60506-81-2
CMF C25 H32 O12



CM 4

CRN 1843-07-8
CMF C19 H18 O6



L56 ANSWER 2 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:510523 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:79428
 TITLE: Cellulose acylate films with good mechanical strengths, optical properties, and storage stability and its optical films, displays, and silver halide photography films
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 60 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004176025	A	20040624	JP 2002-351268	20021203
PRIORITY APPLN. INFO.:			JP 2002-285611	A 20020930

AB The cellulose acylate films are fabricated by solvent casting and light irradiation of cellulose acylate compns. containing monofunctional macromonomers with $M_w \leq 2 \times 10^4$, represented by the general formula $TL[CHb1C(V0R)b2]$ ([] shows repeating unit; T = ~~polymerizable~~ group-containing functional group; V0 = CO₂, CH₂CO₂, O, CONHCO₂, CONHCO, SO₂, CO, CONQ1, SO₂NQ1, phenylene; Q1 = H, C1-8 aliphatic group; b1, b2 = H, halo, CN, alkyl, CH₂CO₂R10; R10 = alkyl; L = group linking V0 with the repeating unit []; R = aliphatic, aryl, heterocyclic group), monomers A, and ~~photopolymer~~ initiators. Preferably, the compns. further contain monomers B bearing light-stabilizing groups and polyfunctional monomers C bearing ≥ 2 ~~polymerizable~~ groups. The cellulose acylate films are useful for polarizer protection films and retardation films for LCD, antireflection films for PDP, Ag halide ~~photog.~~ film supports, etc.

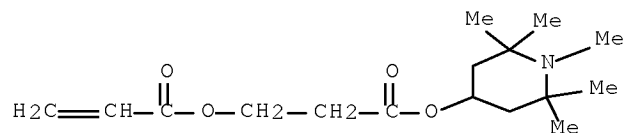
IT 710973-47-0F
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (cellulose acylate films containing copolymers of macromonomers for optical films, displays, and silver halide photog. films)

RN 710973-47-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, cyclohexylmethyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, 2-[[3-hydroxy-2,2-bis[[1-(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[1-(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-methoxyethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyloxy]propyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

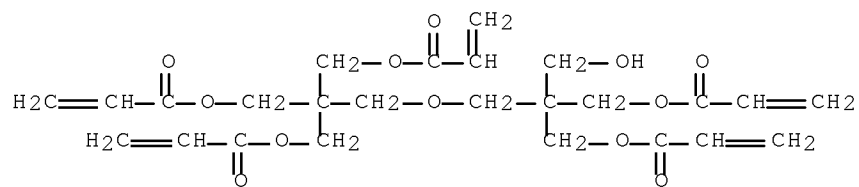
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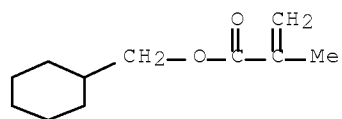
CMF C25 H32 O12



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CRN 16868-16-9

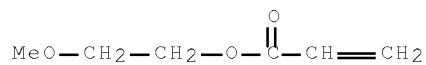
CMF C11 H18 O2



CM 4

CRN 3121-61-7

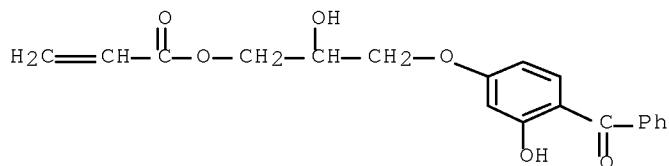
CMF C6 H10 O3



CM 5

CRN 1843-07-8

CMF C19 H18 O6



L56 ANSWER 3 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:492719 HCAPLUS Full-text
 DOCUMENT NUMBER: 141:62033
 TITLE: Cellulose acylate films for optical uses, their
 manufacture, and liquid crystal displays and
 photographic films employing the same
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004168905	A	20040617	JP 2002-336954	20021120
PRIORITY APPLN. INFO.:			JP 2002-336954	20021120

AB Cellulose acylate dopes containing photopolym. macromol. initiators
 TL1D1(OE1OCOE2CO)nR1 or TL2D2(OCE1CO2E2O)nR2 [T = dithiocarbamate, xanthato;
 L1, L2 = bivalent bridging group; E1, E2 = bivalent aliphatic and/or aromatic
 group; D1 = CH2, CO; D2 = O, NH; R1 = OH, OR5, NR6R7 (R5 = C1-12 hydrocarbyl;
 R6, R7 = H, C1-12 hydrocarbyl); R2 = H, C1-12 hydrocarbyl, COR8, CONHR9 (R8,
 R9 = C1-12 hydrocarbyl)], and radical monomers are cast and exposed to light
 to form the claimed films. The dopes may contain light-stable monomers and
 multifunctional monomers. LCD employing the films are also claimed. Photog.
 films having supports comprising 30-250-μm-thick films obtained as above, are
 further claimed. The films show improved flexural strength, storage
 stability, transparency, and tear strength.

IT 708212-19-5P
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (tear-resistant cellulose acylate films containing radically-polymerized
 block copolymers for optical uses)

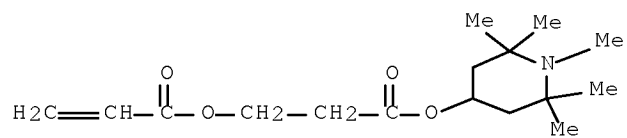
RN 708212-19-5 HCAPLUS

CN 4,7-Methano-1H-indene-5,6-dicarboxylic acid, octahydro-, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate,
 1,6-hexanediol, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-
 propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-
 propanediyl di-2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-
 piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

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CRN 658059-90-6

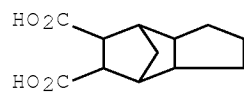
CMF C16 H27 N O4



CM 2

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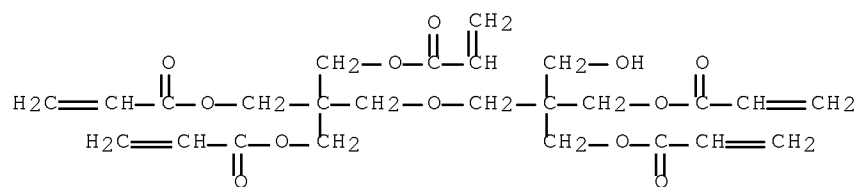
CMF C12 H16 O4



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CRN 60506-81-2

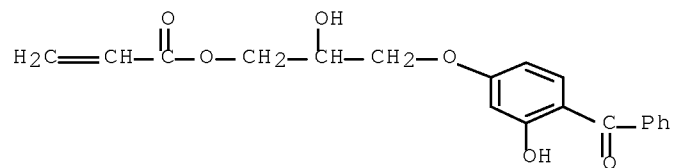
CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



CM 5

CRN 629-11-8
CMF C6 H14 O2

HO—(CH₂)₆—OH

L56 ANSWER 4 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:432933 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:431323
 TITLE: Cellulose acylate films, their manufacture, and
 optical sheets, polarizers, liquid crystal
 displays, and silver halide photographic materials
 using them
 INVENTOR(S): Kato, Eiichi; Moto, Takahiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 66 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004148811	A	20040527	JP 2003-349004	20031008
PRIORITY APPLN. INFO.:			JP 2002-294914	A 20021008

AB The films, showing good tear strength, moisture impermeability, and storage stability and low dependence of retardation on temperature and moisture, are manufactured by casting compns. containing cellulose acylates, radically polymerizable monomers bearing cycloaliph. hydrocarbon groups, and photopolymn. initiators and irradiating them with lights.

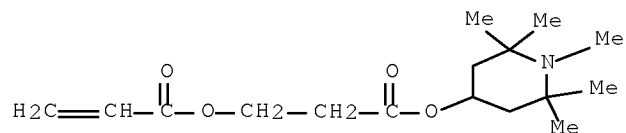
IT 693274-44-1P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manufacture of cellulose acylate films with good storage stability and low dependence of retardation on temperature and moisture for optical films, polarizers, and photog. films)

RN 693274-44-1 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester, polymer with 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate and tricyclo[3.3.1.1^{3,7}]dec-1-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

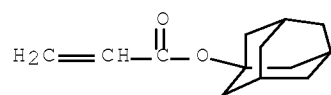
CRN 658059-90-6
CMF C16 H27 N O4



CM 2

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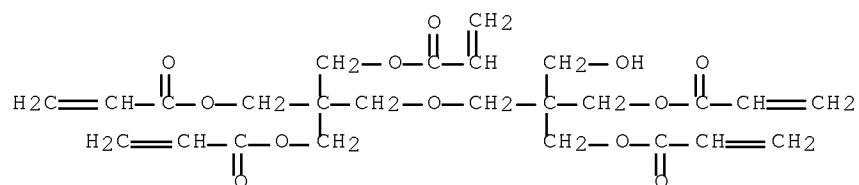
CMF C13 H18 O2



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CRN 60506-81-2

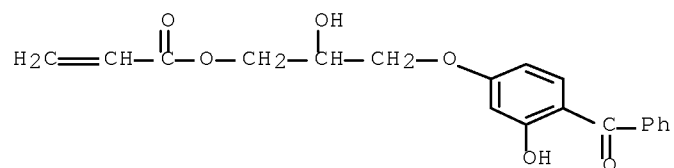
CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



TITLE: Cellulose acylate films with excellent tear strength and storage stability and optical films, display devices, and silver halide photographic materials using them

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 58 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004143392	A	20040520	JP 2002-359522	20021211

PRIORITY APPLN. INFO.: JP 2002-253387 A 20020830

AB The films are obtained by casting cellulose acylate compns. containing monofunctional polyester macromonomers with $M_w \leq 2 \times 10^4$, polymerizable monomers, and photopolymer. initiators and irradiating them with lights.

IT ~~692778-77-1P~~ 692778-79-3P
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (cellulose acylate films with good tear strength and weather resistance for optical films, display devices, and silver halide photog. materials)

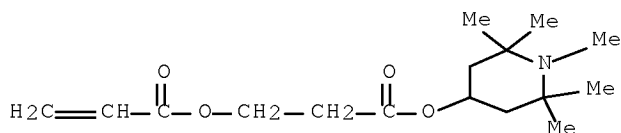
RN 692778-77-1 HCAPLUS

CN 1,3-Cyclopentanedicarboxylic acid, 1,2,2,3-tetramethyl-, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, 1,4-butanediol and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 658059-90-6

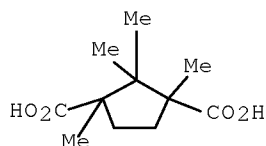
CMF C16 H27 N O4



CM 2

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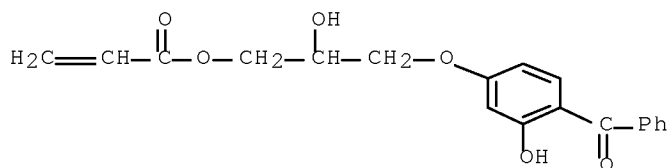
CMF C11 H18 O4



CM 3

CRN 1843-07-8

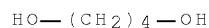
CMF C19 H18 O6



CM 4

CRN 110-63-4

CMF C4 H10 O2



RN 692778-79-3 HCAPLUS

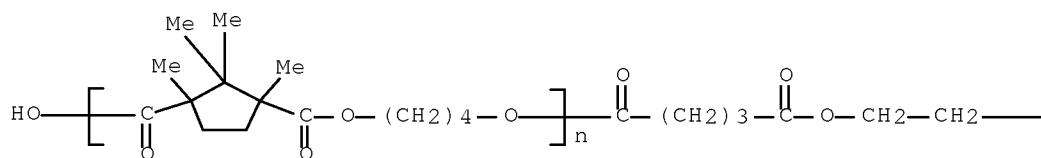
CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester, polymer with α -[1,5-dioxo-5-[2-[(1-oxo-2-propenyl)oxy]ethoxy]pentyl]- ω -hydroxypoly[oxy-1,4-butanediylloxycarbonyl(1,2,2,3-tetramethyl-1,3-cyclopentanediyl)carbonyl] and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

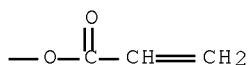
CRN 692778-78-2

CMF (C15 H24 O4)_n C10 H14 O6

CCI PMS



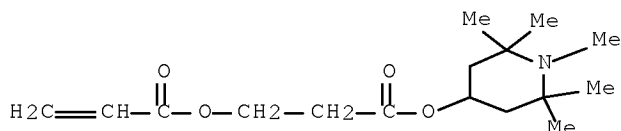
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CM 2

CRN 658059-90-6

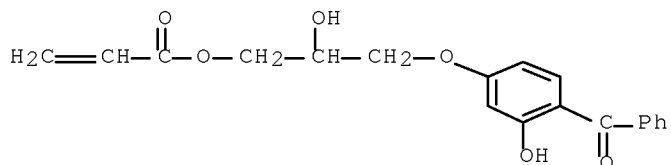
CMF C16 H27 N O4



CM 3

CRN 1843-07-8

CMF C19 H18 O6



L56 ANSWER 6 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:351517 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:383173
 TITLE: Cellulose acylate films, their manufacture, and
 optical films, liquid crystal displays, and
 photographic materials employing the same
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004130674	A	20040430	JP 2002-297744	20021010
PRIORITY APPLN. INFO.:			JP 2002-297744	20021010

AB Cellulose acylate dopes containing macromol. photopolymer. initiators TL[CHAlCA2(V1R)] [T = SC:SNR11R12, SC:SOR13 (R11, R12 = H, hydrocarbyl; R13 = hydrocarbyl); L = bivalent bridging group; A1, A2 = H, halo, cyano, alkyl, CH2CO2Q2 (Q2 = alkyl); V1 = CO2, OCO, CH2OCO, etc.; R = aliphatic or aromatic group] and radical monomers are cast on supports and exposed to light to form films with high tear strength and excellent transparency for the title mentioned uses. Monomers having light-stabilized groups may be incorporated in the said monomers. The films for photog. film supports have thickness 30-250 μm .

IT 684282-24-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of cellulose acylate films having excellent tear strength and transparency for optical, photog., and display uses)

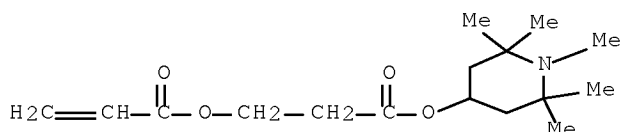
RN 684282-24-4 HCAPLUS

CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclohexyl 2-propenoate, octahydro-4,7-methano-1H-inden-5-yl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate, block (9CI) (CA INDEX NAME)

CM 1

CRN 658059-90-6

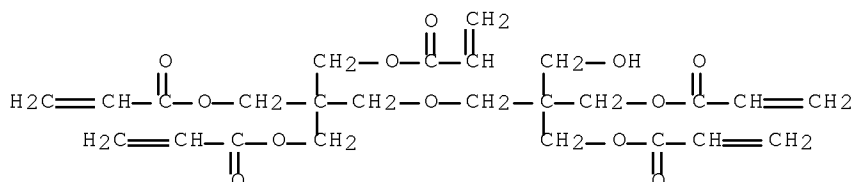
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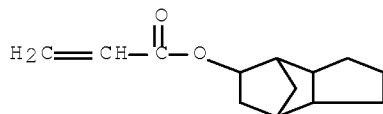
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CMF C25 H32 O12



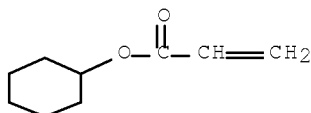
CM 3

CRN 7398-56-3
CMF C13 H18 O2



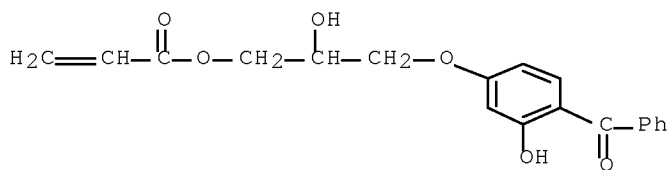
CM 4

CRN 3066-71-5
CMF C9 H14 O2



CM 5

CRN 1843-07-8
CMF C19 H18 O6



L56 ANSWER 7 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:271645 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 140:294934
 TITLE: Cellulose acylate composite films, their manufacture,
 and their uses in optical films, liquid crystal
 displays, and photographic materials
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 48 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004099775	A	20040402	JP 2002-264588	20020910
PRIORITY APPLN. INFO.:			JP 2002-264588	20020910

AB The films are manufactured by casting cellulose acylate compns. containing radically-polymerizable monomers, cationically-polymerizable monomers, and photopolymn. initiators and irradiating the compns. with electron beam (sic). Also claimed are optical films and liquid crystal displays using the films and Ag halide photog. materials using the films with thickness 30-250 μ m as supports. The films show low haze, high tear strength, good weatherability, and neither contamination with foreign substances nor stains. A polarizer film prepared by laminating both sides of an iodine-adsorbed PVA-based polarizer with a pair of the composite cellulose triacetate films shows high durability.

IT 676265-23-9P

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)

(manufacture of cellulose acylate films for LCD, photog. materials, etc., from dopes containing radically-polymerizable monomers, cationically-polymerizable monomers, and photoinitiators)

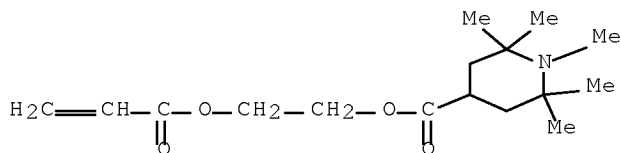
RN 676265-23-9 HCAPLUS

CN 4-Piperidinecarboxylic acid, 1,2,2,6,6-pentamethyl-, 2-[(1-oxo-2-propenyl)oxy]ethyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate and cyclohexylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 676265-22-8

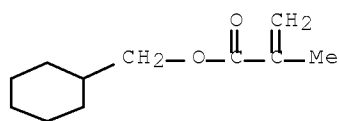
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CM 2

CRN 16868-16-9

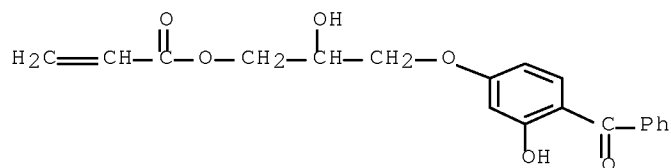
CMF C11 H18 O2



CM 3

CRN 1843-07-8

CMF C19 H18 O6



L56 ANSWER 8 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:217309 HCAPLUS Full-text

DOCUMENT NUMBER: 140:254613

TITLE: Cellulose acylate films, their manufacture, and their
uses in optical films, liquid crystal displays,
and photographic materials

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 47 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

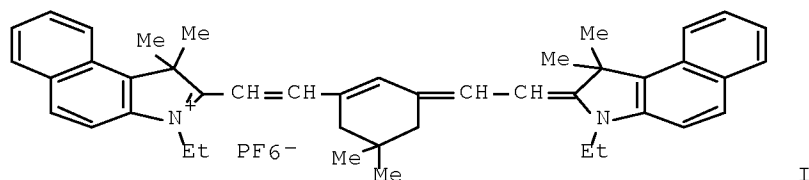
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004083799	A	20040318	JP 2002-249041	20020828
PRIORITY APPLN. INFO.:			JP 2002-249041	20020828
OTHER SOURCE(S):	MARPAT 140:254613			

GI



AB The films are manufactured by casting cellulose acylate compns. containing radically polymerizable monomers, near-IR sensitizers, and photopolymer. initiators and irradiating with near-IR. Thus, a film was manufactured from a dope containing cellulose triacetate, a plasticizer, SiO₂ microparticles, a UV absorber, sensitizer I, tetrabutylammonium 2,4,6-trifluorotetraphenylborate, and N-phenylglycine. The film showed good releasability, low haze, high tear strength, no contamination, and good resistance to weathering and storage at high temperature and humidity.

IT 658059-91-7P

RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PYP (Physical process); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)

(manufacture of cellulose acylate films from dopes containing monomers, near-IR sensitizers, and photopolymer. initiators)

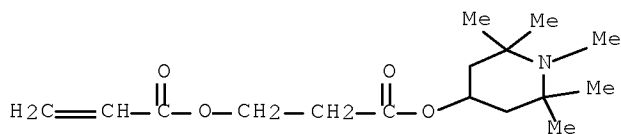
RN 658059-91-7 HCAPLUS

CN 2-Propenoic acid, 2-[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-90-6

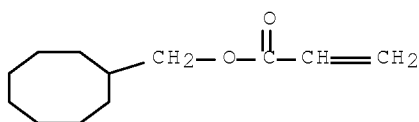
CMF C16 H27 N O4



CM 2

CRN 654072-00-1

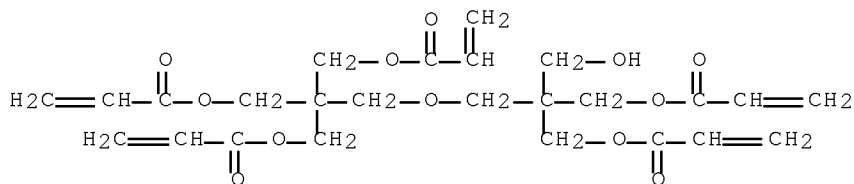
CMF C12 H20 O2



CM 3

CRN 60506-81-2

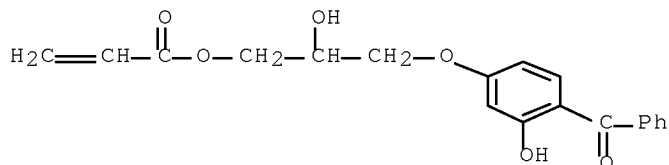
CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



L56 ANSWER 9 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:180035 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 140:243664

TITLE: Cellulose acylate films with excellent transparency, tear strength, and weather resistance, their manufacture, and optical films, liquid crystal displays, and silver halide photographic materials using them

INVENTOR(S): Kato, Eiichi

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 52 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004067816	A	20040304	JP 2002-227579	20020805

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002-227579			JP 2002-227579	20020805

AB The films are manufactured by casting cellulose acylate compns. containing polymerizable monomers, photothermal converting agents, and thermal polymerization initiators and irradiating them with IR.

IT 658059-91-7P

RL: DEV (Device component use); IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of cellulose acylate cast films with good transparency, tear strength, and weather resistance for optical use)

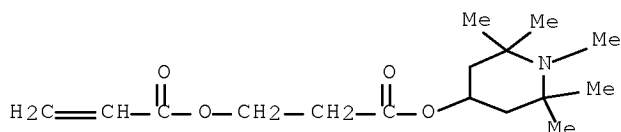
RN 658059-91-7 HCAPLUS

CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyloxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 658059-90-6

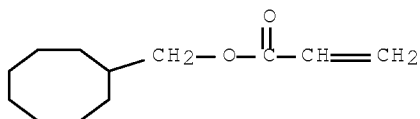
CMF C16 H27 N O4



CM 2

CRN 654072-00-1

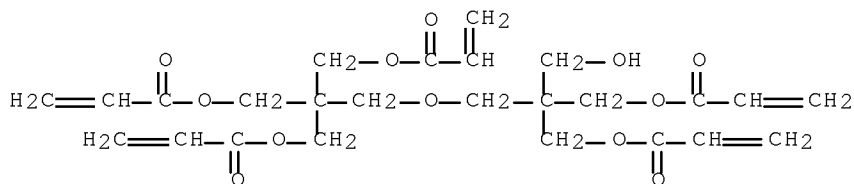
CMF C12 H20 O2



CM 3

CRN 60506-81-2

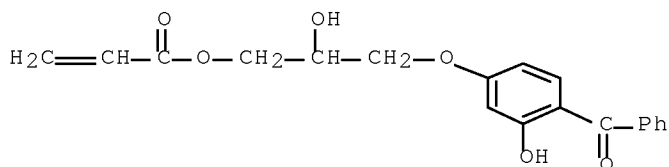
CMF C25 H32 O12



CM 4

CRN 1843-07-8

CMF C19 H18 O6



L56 ANSWER 10 OF 11 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2004:117562 HCAPLUS Full-text
 DOCUMENT NUMBER: 140:189907
 TITLE: Cellulose acylate films, their manufacture, optical films, liquid-crystal displays, and silver halide photographic materials
 INVENTOR(S): Kato, Eiichi
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 61 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004042381	A	20040212	JP 2002-201749	20020710
PRIORITY APPLN. INFO.:			JP 2002-201749	20020710
OTHER SOURCE(S):	MARPAT 140:189907			

AB The films are manufactured by (1) applying cellulose acylate comps. containing polymerizable monomers, photopolymer. initiators, and spectral sensitizers Ar1R3C:CR2C(:X)R1 [R1-R3 = H, monovalent nonmetal atomic group; R1-R3 may form acidic nucleus of dyes; Ar1 = aryl group having OR4, NR5, and/or SR6 at o- or p-position; X = O, S, :NR7; R4-R7 = (un)substituted alkyl or aryl] and (2) irradiating with UV light. The photog. materials have supports of the films with thickness 30-250 μ m. The films show high bending and tear strength and good storage stability.

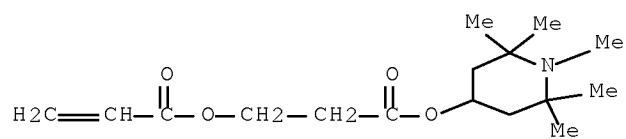
IT 658059-91-7F
 RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (manufacture of cellulose acylate films with high tear strength for LCD and photog. materials)

RN 658059-91-7 HCAPLUS

CN 2-Propenoic acid, 2-[[[3-hydroxy-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, cyclooctylmethyl 2-propenoate and 3-oxo-3-[(1,2,2,6,6-pentamethyl-4-piperidinyl)oxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

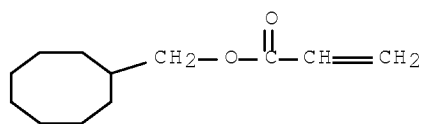
CRN 658059-90-6
 CMF C16 H27 N O4



CM 2

CRN 654072-00-1

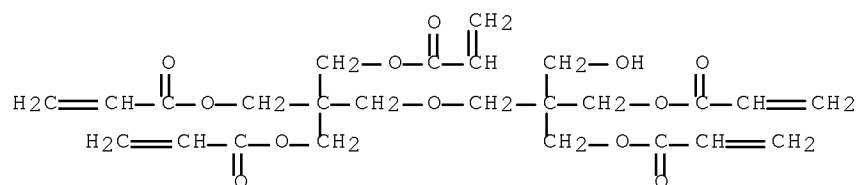
CMF C12 H20 O2



CM 3

CRN 60506-81-2

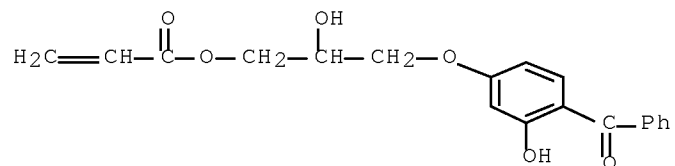
CMF C25 H32 O12



CM 4

CRN 1843-07-8

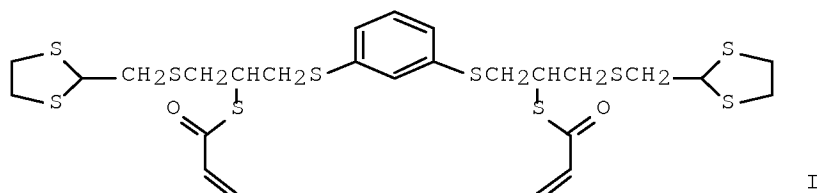
CMF C19 H18 O6



ACCESSION NUMBER: 2002:244667 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:264280
 TITLE: Sulfur-containing (meth)acrylic acid thioesters, their compositions, cured products, and optical materials
 INVENTOR(S): Okuma, Tadashi; Imai, Masao; Ootsuji, Atsuo
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 56 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002097223	A	20020402	JP 2000-288319	20000922
PRIORITY APPLN. INFO.:			JP 2000-288319	20000922
OTHER SOURCE(S):	MARPAT 136:264280			

GI



AB The thioesters, useful for optical lenses, recording materials, liquid crystal cells, optical fiber coatings, etc., are I (R1-R4 = H, alkyl, alkoxy, nitro, halo; R5, R8 = S-containing alkyl; R6, R9 = S-containing substituent; R7, R10 = H, Me; Z1, Z2 = O, S). Thus, 2-mercaptomethyl-1,3-dithiolane was reacted with benzenebis(epithiopropylsulfide) and esterified with acrylic chloride to give I [R1-R5, R7, R8, R10 = H; R6, R9 = (1,3-dithiolan-2-yl)methylthio; Z1, Z2 = S], which was mixed with Darocur 1173 (photoinitiator), resorcinol diglycidyl ether diacrylate, and divinylbenzene and cured by UV-irradiation to give a transparent lens showing reflective index 1.659, Abbe number 33.8, Tg ≥70°, and good impact resistance.

IT 405261-31-6P 405261-32-7P 405261-33-8P
 405261-34-9P 405261-35-0P 405261-36-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(sulfur-containing (meth)acrylic acid thioesters for polymers for optical materials)

RN 405261-31-6 HCAPLUS

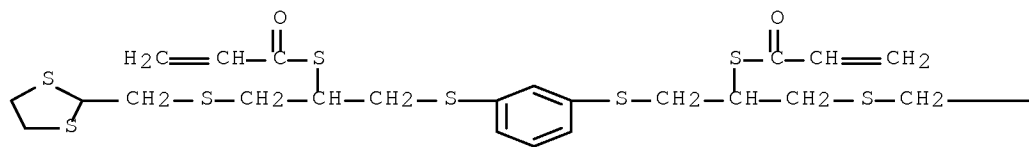
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[thio[1-[[[(1,3-dithiolan-2-ylmethyl)thio]methyl]-2,1-ethanediyl]]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

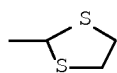
CRN 405261-27-0

CMF C26 H34 O2 S10

PAGE 1-A



PAGE 1-B

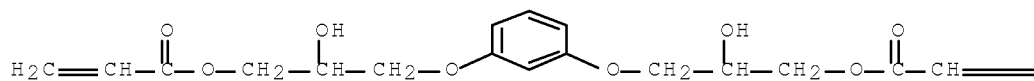


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

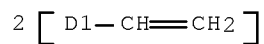


CM 3

CRN 1321-74-0

CMF C10 H10

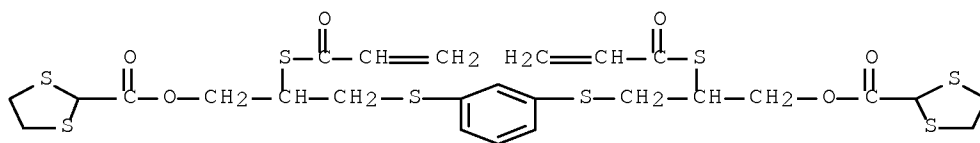
CCI IDS



RN 405261-32-7 HCAPLUS
 CN 1,3-Dithiolane-2-carboxylic acid, 1,3-phenylenebis[thio[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

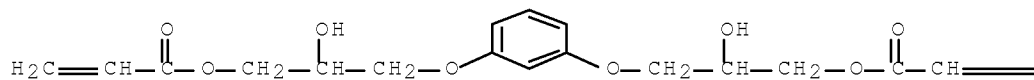
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 CMF C26 H30 O6 S8



CM 2

CRN 126659-18-5
 CMF C18 H22 O8

PAGE 1-A

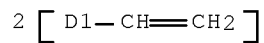


PAGE 1-B



CM 3

CRN 1321-74-0
 CMF C10 H10
 CCI IDS



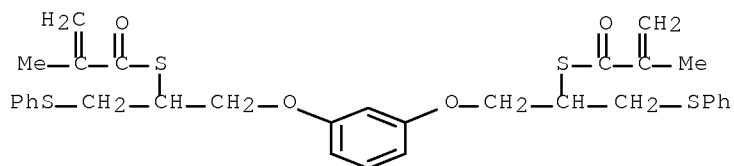
RN 405261-33-8 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

CRN 405261-29-2

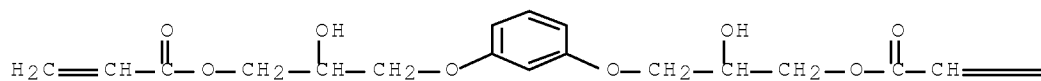
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CM 2

CRN 126659-18-5

CMF C18 H22 O8



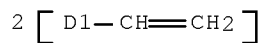
PAGE 1-A

PAGE 1-B



CM 3

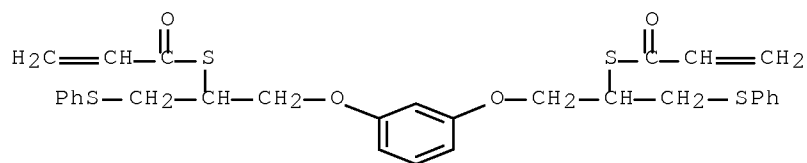
CRN 1321-74-0
 CMF C10 H10
 CCI IDS



RN 405261-34-9 HCAPLUS
 CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

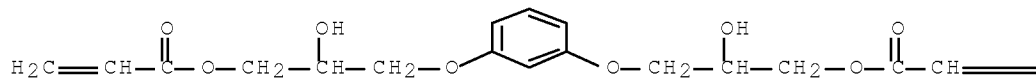
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CM 2

CRN 126659-18-5
 CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

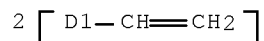


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



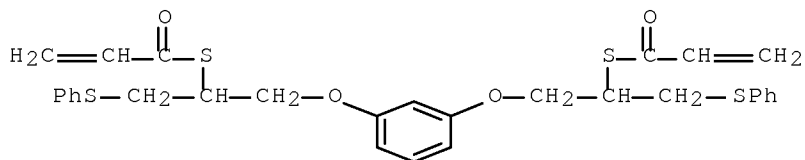
RN 405261-35-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with
 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and
 1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]
 di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

CRN 405261-26-9

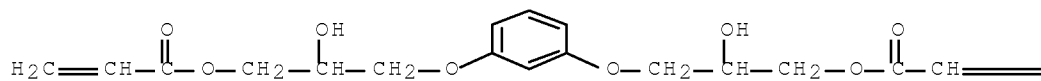
CMF C30 H30 O4 S4



CM 2

CRN 126659-18-5

CMF C18 H22 O8

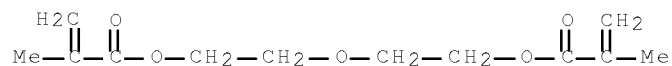


PAGE 1-A



CM 3

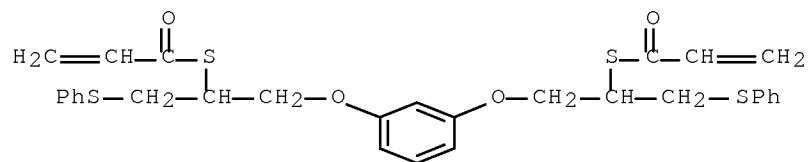
CRN 2358-84-1
CMF C12 H18 O5



RN 405261-36-1 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with
1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and
1,3-phenylenebis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]
di-2-propenethioate (9CI) (CA INDEX NAME)

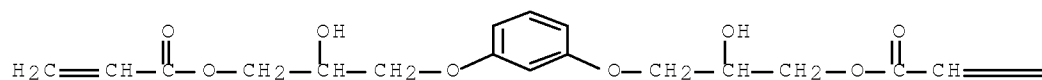
CM 1

CRN 405261-26-9
CMF C30 H30 O4 S4



CM 2

CRN 126659-18-5
CMF C18 H22 O8

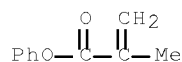


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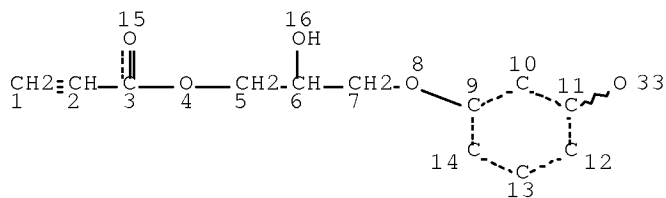
CM 3

CRN 2177-70-0

CMF C10 H10 O2



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L41 STR



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DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 17

STEREO ATTRIBUTES: NONE

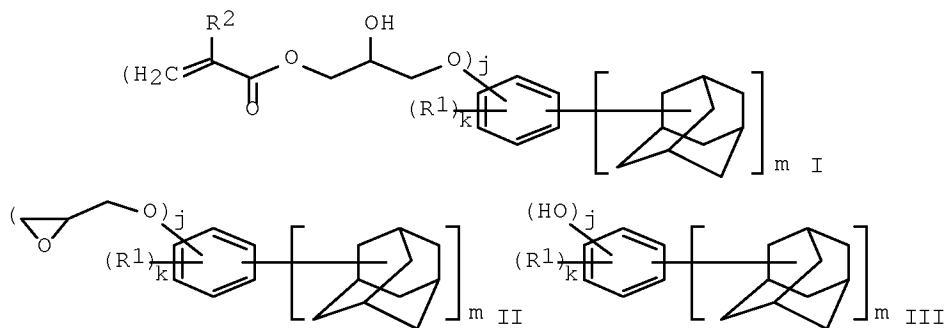
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L48 53 SEA FILE=HCAPLUS ABB=ON PLU=ON L43
L49 70964 SEA FILE=REGISTRY ABB=ON PLU=ON CARBAZOLE
L50 57372 SEA FILE=HCAPLUS ABB=ON PLU=ON ("POLYMERIZATION CATALYSTS
(L) PHOTOPOLYMN."/CV OR "POLYMERIZATION CATALYSTS (L) PHOTOCHEM
."/CV) OR PHOTOPOLYMERI? OR POLYMERIZ?(L)PHOTO?
L51 204364 SEA FILE=HCAPLUS ABB=ON PLU=ON L50 OR ?INITIATOR? OR
?CARBAZOLE? OR L49 OR CARBAZOLE/CV
L52 16 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 AND (L50 OR L51)
L53 34265 SEA FILE=HCAPLUS ABB=ON PLU=ON ("SEALING COMPOSITIONS"/CV OR
"SEALING COMPOSITION"/CV OR "SEALING MATERIALS"/CV) OR
?SEALANT?
L54 207950 SEA FILE=HCAPLUS ABB=ON PLU=ON "LIQUID CRYSTALS"/CV OR
LIQUID(W)CRYSTAL?
L56 11 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 AND (L53 OR L54)

L57 42 SEA FILE=HCAPLUS ABB=ON PLU=ON L48 NOT L56

=> d ibib abs hitstr 157 1-42

L57 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2008:672914 HCAPLUS Full-text
 DOCUMENT NUMBER: 149:32706
 TITLE: Adamantane derivatives for resin compositions with
 good light transparency, light and heat resistance,
 and good mechanical properties
 INVENTOR(S): Ito, Katsuki; Okada, Yasunari; Yamane, Hideki; Kojima,
 Akio
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 48pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008065939	A1	20080605	WO 2007-JP72507	20071121
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM JP 2008133246 A 20080612 JP 2006-322044 20061129 PRIORITY APPLN. INFO.: JP 2006-322044 A 20061129 OTHER SOURCE(S): MARPAT 149:32706 GI				



AB Title title resin compns. comprise an adamantane derivative (I) prepared by reacting an adamantane derivative (II) with an acrylic acid and a light or thermal polymerization initiator or an adamantane derivative (III) and an epoxy resin curing agent, wherein $R_1 = C_nH_{2n+1}$; $R_2 = H, CH_3, F$ or CF_3 ; $j = 1-4$ integer; $k = 0-3$ integer; $m = 2-5$ integer ($j + k + m \leq 6$); and $n = 1-10$ integer. Thus, 0.18 mol 1-adamantanol and 0.09 mol resorcinol were reacted, 0.137 mol of the resulting 4,6-bis(1-adamantyl)-1,3-dihydroxybenzene was reacted with 1.057 mol epichlorohydrin to give 4,6-bis(1-adamantyl)-1,3-diglycidyloxybenzene, 5 g of which was mixed with 3.06 g methylhexahydrophthalic anhydride (Rikacid MH 700) and 0.1 g SA 102 (curing accelerator) to give a composition, showing glass transition temperature 221°, light transmittance 86%, and good heat and light resistance when cured.

IT 1030386-20-9P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(adamantane derivs. for resin compns. with good light transparency, light and heat resistance, and good mech. properties)

RN 1030386-20-9 HCAPLUS

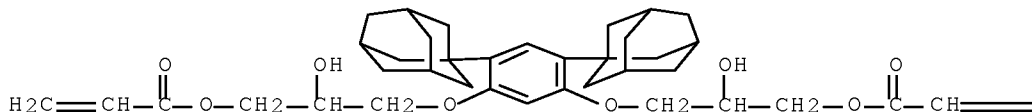
CN 2-Propenoic acid, 1,1'-[[4,6-bis(tricyclo[3.3.1.1^{3,7}]dec-1-yl)-1,3-phenylene]bis[oxy(2-hydroxy-3,1-propanediyl)]] ester, homopolymer (CA INDEX NAME)

CM 1

CRN 1030386-19-6

CMF C38 H50 O8

PAGE 1-A



PAGE 1-B

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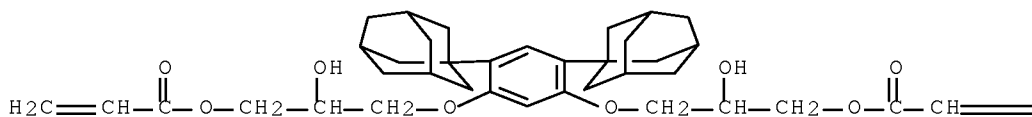
IT 1030386-19-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(monomer; adamantane derivs. for resin compns. with good light transparency, light and heat resistance, and good mech. properties)

RN 1030386-19-6 HCAPLUS

CN 2-Propenoic acid, 1,1'-[[4,6-bis(tricyclo[3.3.1.1^{3,7}]dec-1-yl)-1,3-phenylene]bis[oxy(2-hydroxy-3,1-propanediyl)]] ester (CA INDEX NAME)

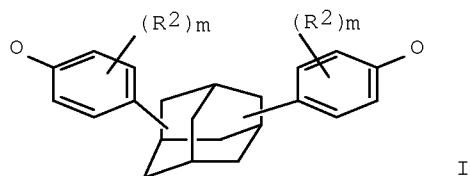
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REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2007:1278414 HCAPLUS Full-text
 DOCUMENT NUMBER: 147:503061
 TITLE: Adamantyl group-containing epoxy-modified (meth)acrylate and resin composition containing the same
 INVENTOR(S): Okada, Yasunari; Ito, Hajime; Yamane, Hideki; Matsumoto, Nobuaki
 PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 39pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007125890	A1	20071108	WO 2007-JP58795	20070424
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
EP 2014691	A1	20090114	EP 2007-742230	20070424
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, RS			
KR 2009005065	A	20090112	KR 2008-726158	20081024
PRIORITY APPLN. INFO.:			JP 2006-125455	A 20060428

OTHER SOURCE(S): MARPAT 147:503061
GI



AB The adamantyl group-containing epoxy-modified (meth)acrylate can provide good optical characteristics such as transparency and durable light resistance, heat resistance and good mech. properties. For example, there are specifically disclosed an adamantyl group-containing epoxy-modified (meth)acrylate represented by the general formula $\text{CH}_2:\text{C}(\text{R}_1)\text{COOCH}_2\text{CH}(\text{OH})\text{CH}_2\text{A}[\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{A}]_n\text{CH}_2\text{CH}(\text{OH})\text{CH}_2\text{OCOC}(\text{R}_1):\text{CH}_2$ ($\text{A} = \text{I}$; $\text{R}_1 = \text{H}, \text{Me}$; $\text{R}_2 = \text{halogen, aliphatic hydrocarbon group}$; $m = 0-4$; and $n \geq 0$). A resin composition contains such an adamantyl group-containing epoxy-modified (meth)acrylate.

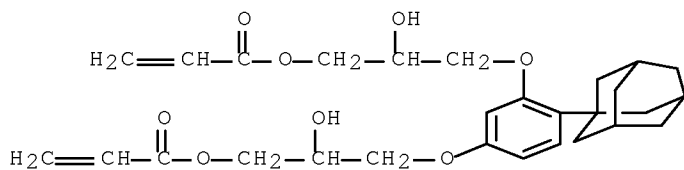
IT 955943-50-7P 955943-51-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(adamantyl group-containing epoxy-modified (meth)acrylate and resin composition containing the same)

RN 955943-50-7 HCAPLUS

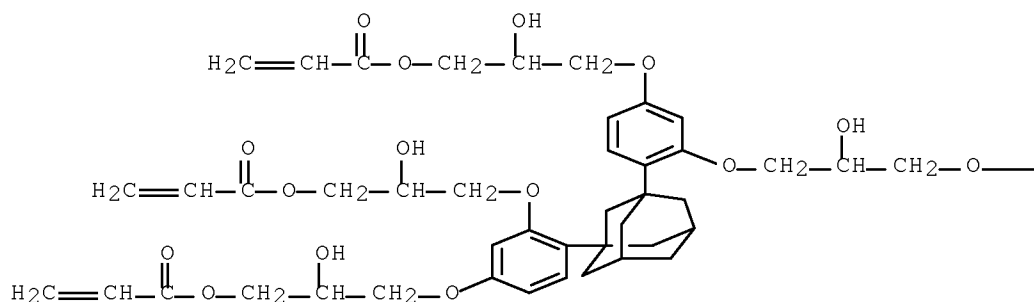
CN 2-Propenoic acid, 1,1'-[(4-tricyclo[3.3.1.1³,7]dec-1-yl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)]] ester (CA INDEX NAME)



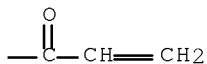
RN 955943-51-8 HCAPLUS

CN 2-Propenoic acid, 1,1',1'',1'''-[tricyclo[3.3.1.1³,7]decane-1,3-diylbis[1,2,4-benzenetriylbis[oxy(2-hydroxy-3,1-propanediyl)]]] ester (CA INDEX NAME)

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IT 955943-55-2P 955943-56-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(adamantyl group-containing epoxy-modified (meth)acrylate and resin composition

containing the same)

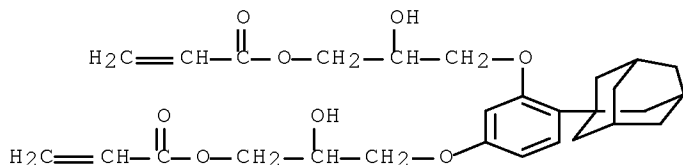
RN 955943-55-2 HCAPLUS

CN 2-Propenoic acid, 1,1'-[(4-tricyclo[3.3.1.3,7]dec-1-yl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)]] ester, homopolymer (CA INDEX NAME)

CM 1

CRN 955943-50-7

CMF C28 H36 O8



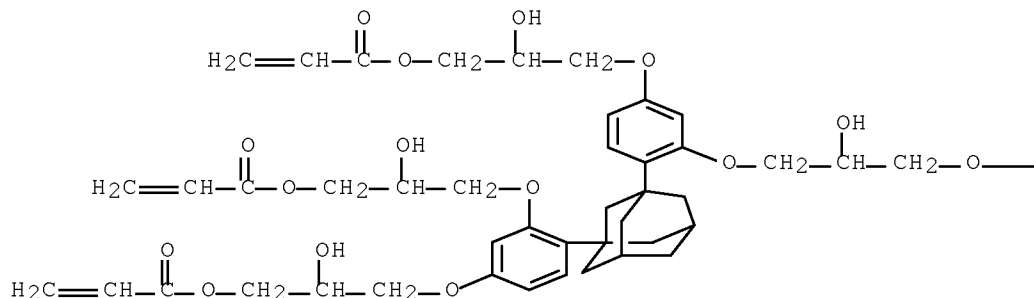
RN 955943-56-3 HCAPLUS

CN 2-Propenoic acid, 1,1',1'',1'''-[tricyclo[3.3.1.3,7]decane-1,3-diylbis[1,2,4-benzenetriylbis[oxy(2-hydroxy-3,1-propanediyl)]]] ester, homopolymer (CA INDEX NAME)

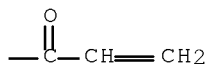
CM 1

CRN 955943-51-8
CMF C46 H56 O16

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PAGE 1-B



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:618794 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 147:53768

TITLE: Single layer film and hydrophilic material containing the film with good resistance to fogging, soiling and static complication

INVENTOR(S): Okazaki, Koju; Seki, Ryouichi; Katou, Takazou; Takagi, Masatoshi

PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan

SOURCE: PCT Int. Appl., 147pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007064003	A1	20070607	WO 2006-JP324131	20061127
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,				

RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
 TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

EP 1955782 A1 20080813 EP 2006-833901 20061127

R: DE, FR, GB, IT

CN 101309760 A 20081119 CN 2006-80042823 20080516

KR 2008075540 A 20080818 KR 2008-716110 20080701

PRIORITY APPLN. INFO.:

JP 2005-348860 A 20051202

WO 2006-JP324131 W 20061127

AB Disclosed is a single layer film having at least one anionic hydrophilic group selected from a sulfonic acid group, a carboxyl group and a phosphoric acid group, wherein the anion concentration ratio (Sa/Da) between the anion concentration in the surface (Sa) and the anion concentration in the deep portion (Da) is not less than 1.1. This single layer film is composed of a copolymer having a contact angle with water of not more than 30° which is obtained by polymerizing a composition containing (meth)acrylic compds. bearing sulfonic, carboxylic or phosphoric acid (or their salt) groups with a compound having ≥ 2 (meth)acryloyl groups in a mol. at a molar ratio of 15:1-1:30. Such a single layer film has high hydrophilicity and high surface hardness, while being excellent in antifog property, antifouling property and antistatic property. Consequently, the single layer film is useful for antifog materials, antifouling materials, antistatic materials and multilayer bodies.

IT 939811-66-2P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of single layer film and hydrophilic material containing the

film

with good resistance to fogging, soiling and static complication)

RN 939811-66-2 HCAPLUS

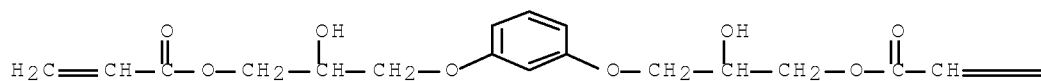
CN 2-Propenoic acid, 1,1'-[1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]] ester, polymer with $\alpha, \alpha', \alpha''$ -1,2,3-propanetriyltris[ω -(1-oxo-2-propen-1-yl)oxy]poly(oxy-1,2-ethanediyl)] and 3-sulfopropyl 2-propenoate potassium salt (1:1) (CA INDEX NAME)

CM 1

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A





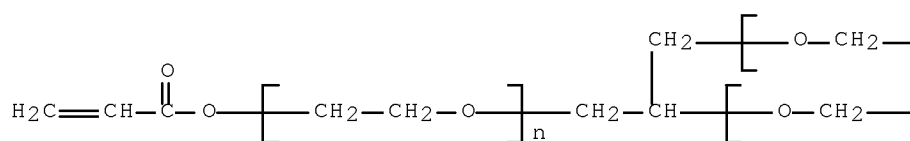
CM 2

CRN 101661-95-4

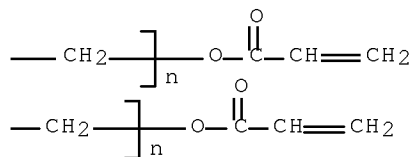
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CCI PMS

PAGE 1-A



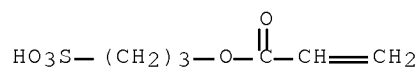
PAGE 1-B



CM 3

CRN 31098-20-1

CMF C6 H10 O5 S . K



● K

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1178034 HCAPLUS Full-text

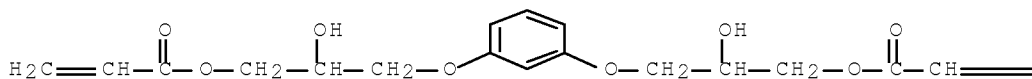
DOCUMENT NUMBER: 143:442098

TITLE: Self-photoinitiating water-dispersible acrylate
ionomers and synthetic methods

INVENTOR(S): Narayan-Sarathy, Sridevi; Fechter, Robert B.
 PATENT ASSIGNEE(S): Ashland Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 15 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050245711	A1	20051103	US 2004-834056	20040429
US 7317061	B2	20080108		
AU 2005243276	A1	20051124	AU 2005-243276	20050421
CA 2564314	A1	20051124	CA 2005-2564314	20050421
WO 2005111104	A2	20051124	WO 2005-US13666	20050421
WO 2005111104	A3	20060518		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1765888	A2	20070328	EP 2005-741804	20050421
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1968979	A	20070523	CN 2005-80019223	20050421
BR 2005010420	A	20071030	BR 2005-10420	20050421
JP 2007534830	T	20071129	JP 2007-510814	20050421
KR 2007017395	A	20070209	KR 2006-725018	20061128
US 20080085981	A1	20080410	US 2007-952601	20071207
PRIORITY APPLN. INFO.:			US 2004-834056	A 20040429
			WO 2005-US13666	W 20050421
AB	The invention comprises multifunctional acrylate ionomeric resins, which are water-dispersible, and have built-in photoinitiator. The inventive resins are made self-photoinitiating by their reaction with β -keto esters (e.g., acetoacetates), β -diketones (e.g., 2,4-pentanedione), β -keto amides (e.g., acetoacetanilide, acetoacetamide), and/or other β -dicarbonyl compds. that can participate in the Michael addition reaction as Michael donors. These water-dispersible resins cure under standard UV cure conditions to give tack-free coatings without the addition of photoinitiators. The invention further relates to the use of these resins in coatings.			
IT	126659-18-5			
	RL: RCT (Reactant); RACT (Reactant or reagent) (precursor; self-photoinitiating water-dispersible polyurethane acrylate ionomers for photocurable coatings)			
RN	126659-18-5 HCAPLUS			
CN	2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)			

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REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:492037 HCAPLUS Full-text
 DOCUMENT NUMBER: 143:347581
 TITLE: Manufacture of naphthyl phenyl ketones as polymerizable UV absorbers for contact and intraocular lenses
 INVENTOR(S): Labsky, Jiri
 PATENT ASSIGNEE(S): Ustav Makromolekularni Chemie AV CR, Czech Rep.
 SOURCE: Czech Rep., 14 pp.
 CODEN: CZXXED
 DOCUMENT TYPE: Patent
 LANGUAGE: Czech
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CZ 294714	B6	20050216	CZ 2002-3989	20021205
PRIORITY APPLN. INFO.:			CZ 2002-3989	20021205
OTHER SOURCE(S):	MARPAT	143:347581		
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I-IV; R1-R8 = H, OH, SO₃H, SO₂NH₂, CO₂H, carboxylate ester, carboxamide, halo, C1-4 alkyl, allyl, isoprenyl, acryloyloxy, H₂C:CRCO₂CH₂CH₂OCH₂CH₂O; H₂C:CRCONH(CH₂)_nO, etc.; R = H, Me; n unspecified] are characterized by the presence of an OH group in neighborhood of a keto group and a polymerizable group on benzene or naphthalene portion of a mol. For example, adding dropwise a solution of 0.05 mol 2-naphthoyl chloride in 30 mL ClCH₂CH₂Cl to a suspension of 7.5 g AlCl₃ in 20 mL ClCH₂CH₂Cl, adding dropwise a solution of 0.045 mol 1,3-dihydroxybenzene in 40 mL MeNO₂ over 40 min to the mixture with cooling to 15-20° and pouring the reaction mixture over 300 g ice gave 3.8 g (2,4-dihydroxyphenyl)(naphth-2'-yl)methanone (V) as yellowish crystals (m. 205-205.5°). Adding dropwise a solution of 0.016 mol methacryloyl chloride in 20 mL benzene to stirred mixture of 0.01 mol V and

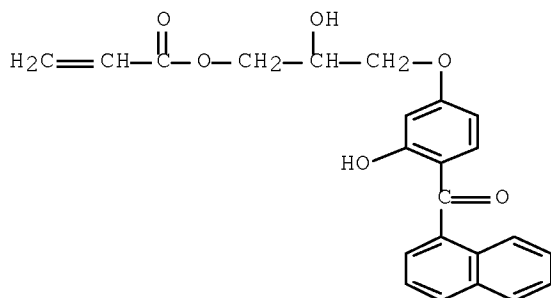
0.011 mol NaOH in 20 mL H₂O and 20 mL benzene over 30 min at 5° and stirring the whole for 60 min at 5° gave 0.4 g 3-hydroxy-4-(naphtho-2'-yl)phenyl methacrylate (m. 105°).

IT ~~865754-18-3~~ ~~865754-20-7~~

RL: TEM (Technical or engineered material use); USES (Uses)
(manufacture of naphthyl Ph ketones as polymerizable UV absorbers for contact and intraocular lenses)

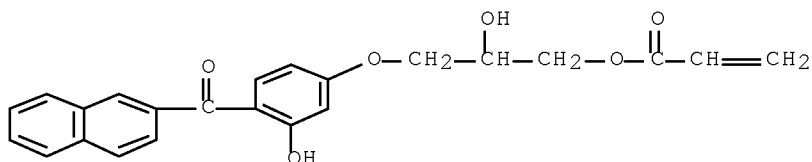
RN 865754-18-3 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-3-[3-hydroxy-4-(1-naphthalenylcarbonyl)phenoxy]propyl ester (CA INDEX NAME)



RN 865754-20-7 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-3-[3-hydroxy-4-(2-naphthalenylcarbonyl)phenoxy]propyl ester (CA INDEX NAME)



L57 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:945479 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 139:401393

TITLE: Acrylic epoxy-based polymerizable compounds, their compositions, and their cured products with good processability and smooth surface for optical waveguides

INVENTOR(S): Ozaki, Toru; Koyanagi, Takao; Yokoshima, Minoru

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

 JP 2003342351 A 20031203 JP 2002-157326 20020530
 JP 3904976 B2 20070411

PRIORITY APPLN. INFO.: JP 2002-157326 20020530

AB The invention relates to the polymerizable compds. of (A) reaction products of resorcin-type diglycidyl ethers and (meth)acrylic acid or maleimido-containing monocarboxylic acids or (B) reaction products of A and polybasic acid anhydrides. The compns. show good transparency and controllability of their refractive index.

IT 627080-44-8P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(clad; resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)

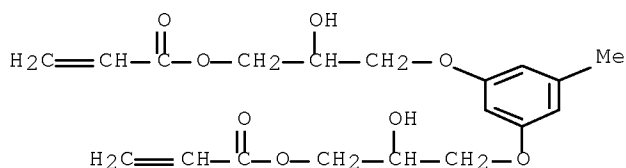
RN 627080-44-8 HCAPLUS

CN 2-Propenoic acid, (5-methyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 3,3,4,4,5,5,6,6-octafluoro-1,8-octanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 627080-41-5

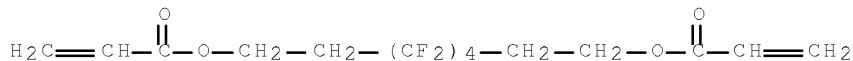
CMF C19 H24 O8



CM 2

CRN 118643-50-8

CMF C14 H14 F8 O4



IT 627080-43-7P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(core; resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)

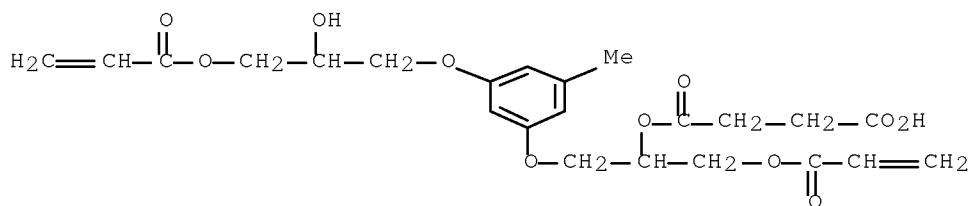
RN 627080-43-7 HCAPLUS

CN Butanedioic acid, mono[1-[[3-[2-hydroxy-3-[(1-oxo-2-propenyl)oxy]propoxy]-5-methylphenoxy]methyl]-2-[(1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 1,6-hexanediyl di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 627080-42-6

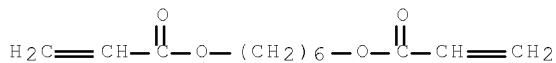
CMF C23 H28 O11



CM 2

CRN 13048-33-4

CMF C12 H18 O4



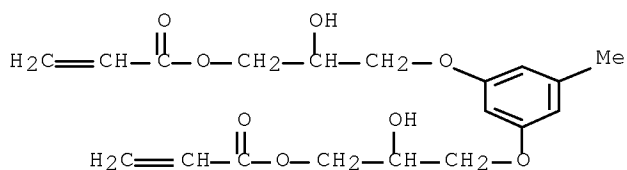
IT 627080-41-5P 627080-42-6P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(resorcin-type acrylic epoxy resins with good processability and smooth surface for optical waveguides)

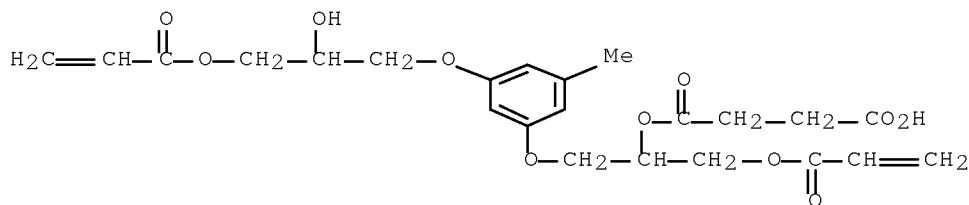
RN 627080-41-5 HCAPLUS

CN 2-Propenoic acid, (5-methyl-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



RN 627080-42-6 HCAPLUS

CN Butanedioic acid, 1-[1-[[3-[2-hydroxy-3-[(1-oxo-2-propen-1-yl)oxy]propoxy]-5-methylphenoxy]methyl]-2-[(1-oxo-2-propen-1-yl)oxy]ethyl] ester (CA INDEX NAME)



L57 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:711699 HCAPLUS Full-text

DOCUMENT NUMBER: 139:246970

TITLE: Ultraviolet ray absorbents and polymer-bond
benzotriazole ultraviolet ray absorbents and
manufacture methods and treated articles and treating
methodsINVENTOR(S): Shimanaka, Hiroyuki; Saikatsu, Hiroaki; Fukuda,
Tetsuo; Yamashita, Rokuya; Nakamura, Michie

PATENT ASSIGNEE(S): Dainichiseika Color and Chemical Mfg. Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003253248	A	20030910	JP 2002-56283	20020301
JP 2007169660	A	20070705	JP 2007-67200	20070315
PRIORITY APPLN. INFO.:			JP 2002-56283	A3 20020301

AB 2-(2',4'-Dihydroxyphenyl)-2H-benzotriazole (I) is treated with epoxides or alc. OH group-containing halogen compds. to prepare reactive UV absorbers. Thus, I was treated with 4-chloro-1-butanol to prepare 2-benzotriazole-2-yl-5-(4'-hydroxybutoxy)phenol, which (70.8 parts) was treated with 100 parts 25:75 Et acrylate-ethylene copolymer to prepare a polymer-bond UV absorber.

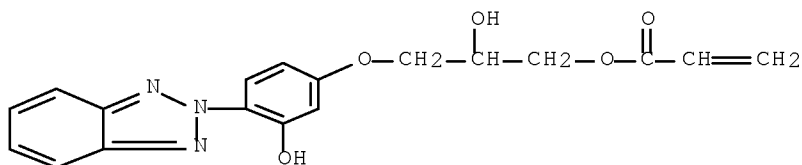
IT 25177-21-3P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(polymer-bond benzotriazole UV absorbents for inks and coatings and cosmetics and photog. materials)

RN 25177-21-3 HCAPLUS

CN 2-Propenoic acid, 3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



IT 596851-44-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polymer-bond benzotriazole UV absorbents for inks and coatings and cosmetics and photog. materials)

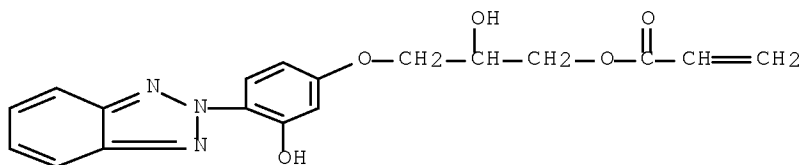
RN 596851-44-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with ethyl 2-methyl-2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and 2-hydroxy-3-[3-hydroxy-4-(2H-benzotriazol-2-yl)phenoxy]propyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 25177-21-3

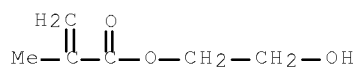
CMF C18 H17 N3 O5



CM 2

CRN 868-77-9

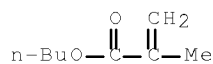
CMF C6 H10 O3



CM 3

CRN 97-88-1

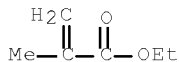
CMF C8 H14 O2



CM 4

CRN 97-63-2

CMF C6 H10 O2



L57 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:347394 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:361629
 TITLE: (Meth)acrylic acid thioesters, their compositions,
 optical parts manufactured from them with high
 efficiency, and dimercapto compounds
 INVENTOR(S): Okuma, Tadashi; Imai, Masao; Otsuji, Atsuo
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 89 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002128827	A	20020509	JP 2000-331186	20001030
PRIORITY APPLN. INFO.:			JP 2000-331186	20001030
OTHER SOURCE(S):	MARPAT 136:361629			

AB The thioesters, useful for lenses, optical recording media, liquid crystal cells, and optical fibers, are shown as
 $\text{R13CH2:CR12[SC:OCR14(:CH2)]Z2Q1Y1Q2Z1CH:CR9[SC:OCR11(:CH2)]CH2R10}$ (Q1 = R1-4-substituted phenylene; Q2 = R5-6-substituted phenylene; R1-8 = H, alkyl, alkoxy, nitro, halo; R9,12 = H, alkyl; R10,13 = S-containing substituent; R11,14 = H, Me; Y1 = single bond, CR15R16; R15,16 = H, alkyl, aryl, O, S, SO2; Z1,2 = O, S). Lenses manufactured by curing the thioesters show good transparency, impact resistance, and refractive index.

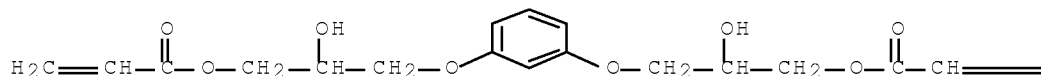
IT 126659-18-5P 422319-84-4P 422319-85-5P
 422319-86-6P 422319-87-7P 422319-88-8P
 422320-50-1P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)

RN 126659-18-5 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester
 (9CI) (CA INDEX NAME)

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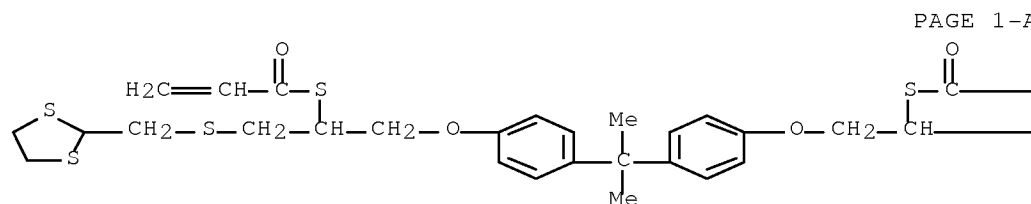
RN 422319-84-4 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(1-methylethylidene)bis[4,1-phenyleneoxy[1-[[[(1,3-dithiolan-2-ylmethyl)thio]methyl]-2,1-ethanediyl]]]] di-2-propenethioate (9CI) (CA INDEX NAME)

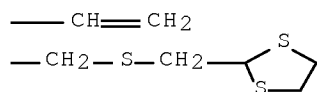
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CRN 422319-78-6

CMF C35 H44 O4 S8



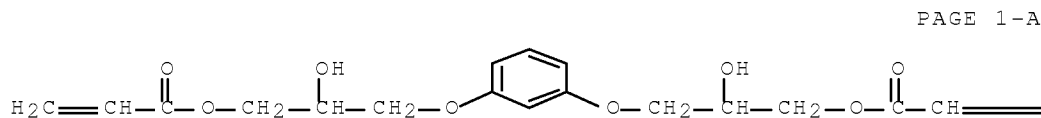
PAGE 1-B



CM 2

CRN 126659-18-5

CMF C18 H22 O8



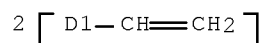


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



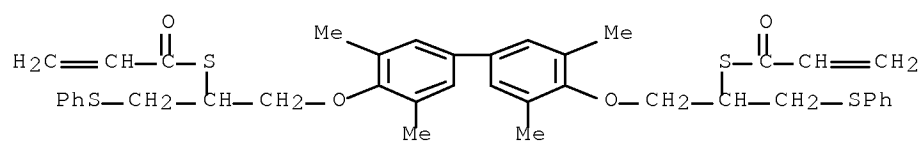
RN 422319-85-5 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

CRN 422319-77-5

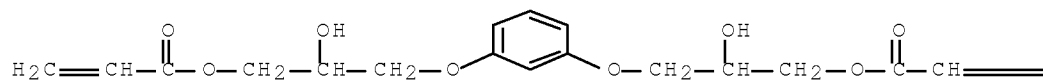
CMF C40 H42 O4 S4



CM 2

CRN 126659-18-5

CMF C18 H22 O8



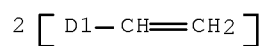


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



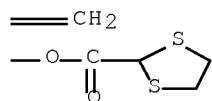
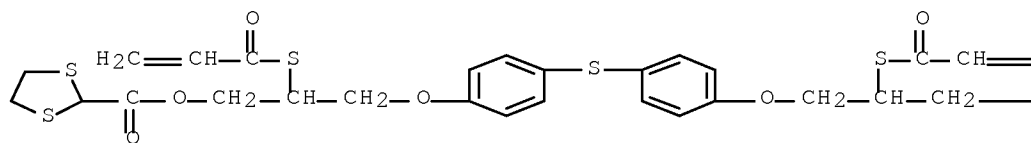
RN 422319-86-6 HCAPLUS

CN 1,3-Dithiolane-2-carboxylic acid, thiobis[4,1-phenyleneoxy[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 422319-79-7

CMF C32 H34 O8 S7

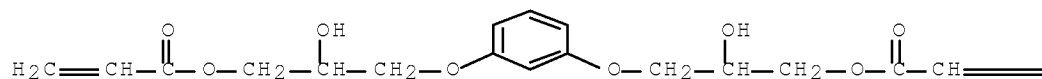


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

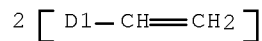


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



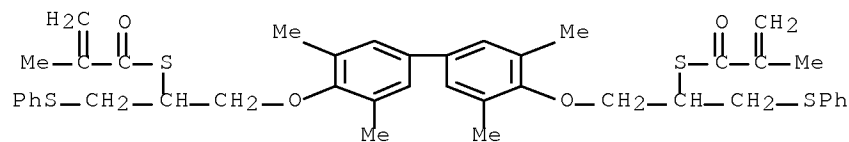
RN 422319-87-7 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

CRN 422319-80-0

CMF C42 H46 O4 S4

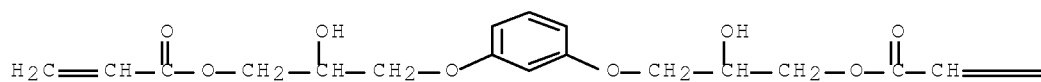


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

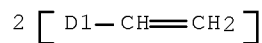


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



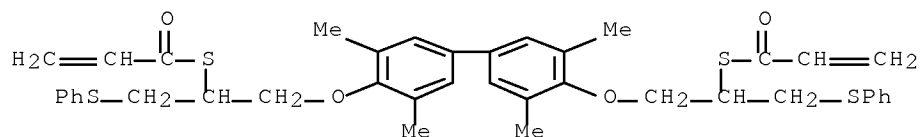
RN 422319-88-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

CRN 422319-77-5

CMF C40 H42 O4 S4

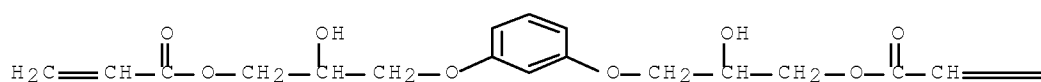


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



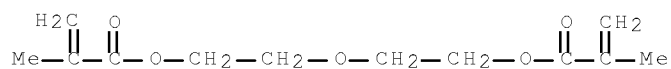
PAGE 1-B

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CM 3

CRN 2358-84-1

CMF C12 H18 O5



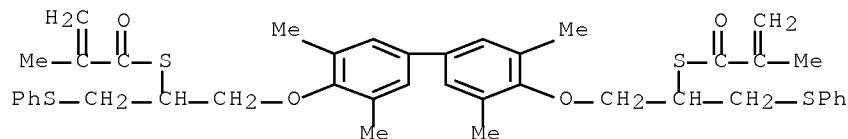
RN 422320-50-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with
 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate and
 S,S'-[(3,3',5,5'-tetramethyl[1,1'-biphenyl]-4,4'-diyl)bis[oxy[1-
 [(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate)
 (9CI) (CA INDEX NAME)

CM 1

CRN 422319-80-0

CMF C42 H46 O4 S4

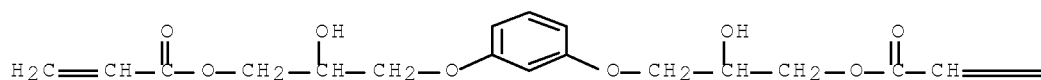


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



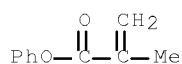
PAGE 1-B



CM 3

CRN 2177-70-0

CMF C10 H10 O2



L57 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2002:344938 HCAPLUS Full-text
 DOCUMENT NUMBER: 136:361627
 TITLE: (Meth)acrylic acid thioesters, their compositions, optical parts manufactured from them with high efficiency, and dimercapto compounds
 INVENTOR(S): Okuma, Tadashi; Imai, Masao; Ootsuji, Atsuo
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002128826	A	20020509	JP 2000-320895	20001020

PRIORITY APPLN. INFO.: JP 2000-320895 20001020

OTHER SOURCE(S): MARPAT 136:361627

AB The thioesters, useful for lenses, optical recording media, liquid crystal cells, and optical fibers, are shown as
 $R_9CH_2:CR_8[SC:OCR_{10}(:CH_2)]Z_2CH_2QCH_2Z_1CH:CR_5[SC:OCR_7(:CH_2)]CH_2R_6$ (Q = R₁-4-substituted phenylene; R₁-4 = H, alkyl, alkoxy, nitro, halo; R₅,8 = H, alkyl; R₆,9 = S-containing substituent; R₇,10 = H, Me; Z₁,2 = O, S). Lenses manufactured by curing the thioesters show good transparency, impact resistance, and refractive index.

IT 422311-65-7P 422311-66-8P 422311-67-9P
 422311-68-0P 422311-69-1P 422311-70-4P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (acrylic acid thioester compns. for optical parts with high refractive index and impact resistance)

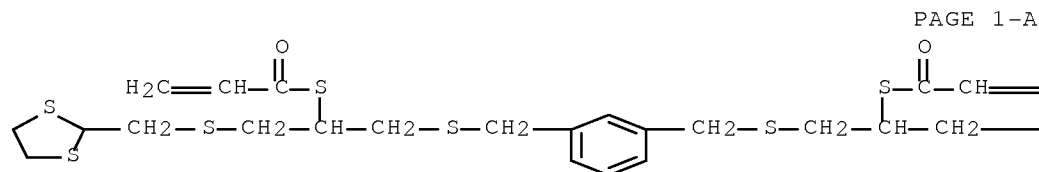
RN 422311-65-7 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methylenethio[1-[[[1,3-dithiolan-2-ylmethyl]thio]methyl]-2,1-ethanediyl]]]] di-2-propenethioate (9CI) (CA INDEX NAME)

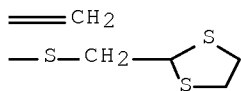
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CRN 422311-58-8

CMF C28 H38 O2 S10



PAGE 1-B

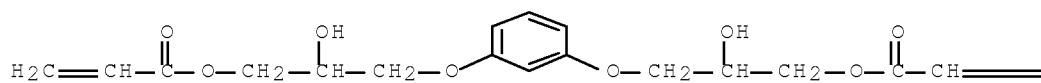


CM 2

CRN 126659-18-5

CMF C18 H22 O8

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PAGE 1-B

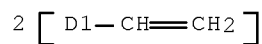


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



RN 422311-66-8 HCAPLUS

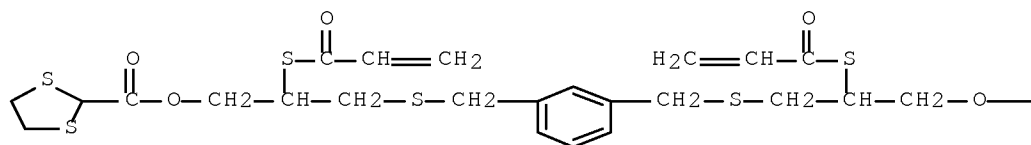
CN 1,3-Dithiolane-2-carboxylic acid, 1,3-phenylenebis[methylenethio[2-[(1-oxo-2-propenyl)thio]-3,1-propanediyl]] ester, polymer with diethenylbenzene and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

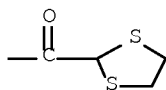
CRN 422311-59-9

CMF C28 H34 O6 S8

PAGE 1-A



PAGE 1-B

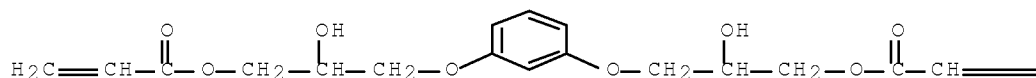


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

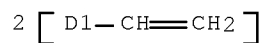


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



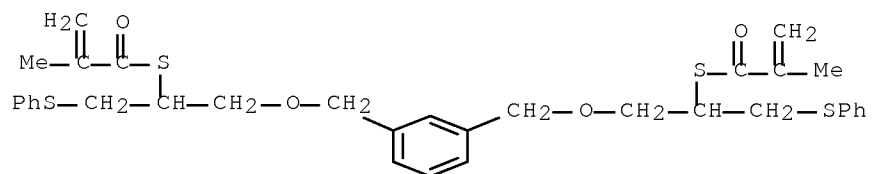
RN 422311-67-9 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] bis(2-methyl-2-propenethioate) (9CI) (CA INDEX NAME)

CM 1

CRN 422311-60-2

CMF C34 H38 O4 S4

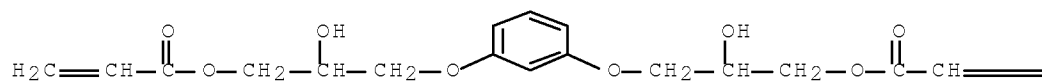


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



PAGE 1-B

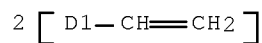


CM 3

CRN 1321-74-0

CMF C10 H10

CCI IDS



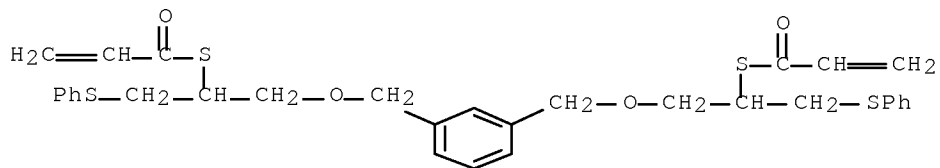
RN 422311-68-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, oxydi-2,1-ethanediyl ester, polymer with
 S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate and
 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

CRN 422311-57-7

CMF C32 H34 O4 S4

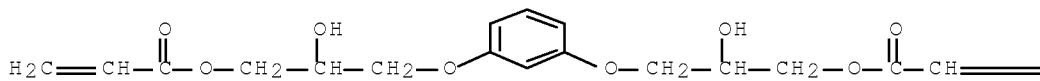


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



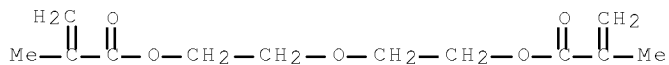
PAGE 1-B



CM 3

CRN 2358-84-1

CMF C12 H18 O5



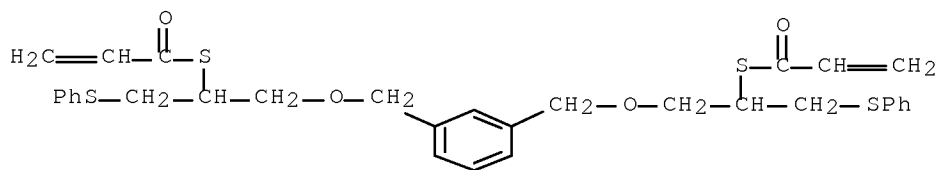
RN 422311-69-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, phenyl ester, polymer with
S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-
ethanediyl]]] di-2-propenethioate and
1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 422311-57-7

CMF C32 H34 O4 S4

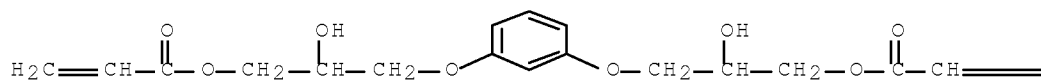


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



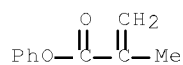
PAGE 1-B



CM 3

CRN 2177-70-0

CMF C10 H10 O2



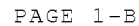
RN 422311-70-4 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with diethenylbenzene and S,S'-[1,3-phenylenebis[methyleneoxy[1-[(phenylthio)methyl]-2,1-ethanediyl]]] di-2-propenethioate (9CI) (CA INDEX NAME)

CM 1

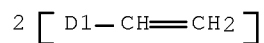


PAGE 1-A



CM 3

CRN 1321-74-0
CMF C10 H10
CCI IDS



INVENTOR(S): compositions
 Tanaka, Motomi; Fukuzumi, Tatsushi; Ito, Takaaki
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001323209	A	20011122	JP 2000-139933	20000512
PRIORITY APPLN. INFO.:			JP 2000-139933	20000512

AB Title compns., also having good storage stability and water resistance, contain polymers prepared from CH₂:CR₁COOC(CH₃)₃ (R₁ = H, Me, or Et) 5-80, piperidyl-containing ethylenic unsatd. compds. 0.1-10, UV- absorbing ethylenic unsatd. compds. 0.1-10, ethylenic unsatd. acids 0.1-10, and other ethylenic unsatd. compds. 0-94.7%. An aqueous emulsion containing tert-Bu methacrylate-Bu methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy)benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer with glass-transition temperature of -19° showed viscosity change of <5% after storing at 40° for 168 h and room temperature for 1 mo, good adhesion to steel plates and acrylic or fluoro resin coatings, and good soil, water, and weather resistance.

IT 374901-41-4P, Tert-Butyl methacrylate-butyl methacrylate-2-ethylhexyl acrylate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-(2'-hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-hydroxy-5'-methacryloxyethylphenyl)-2H-benzotriazole-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy)benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer 374901-42-5P 374901-45-8P 374901-46-9P, Tert-Butyl acrylate-tert-butyl methacrylate-ethylene glycol methacrylate tetrahydrophthalate-methacrylic acid-1,2,2,6,6-pentamethyl-4-piperidyl methacrylate-2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxy) benzophenone-2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy) benzophenone copolymer
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (piperidyl methacrylate- and UV absorbing (meth)acrylate-containing acrylic resin aqueous coatings with adhesion to steel plates and other coatings)

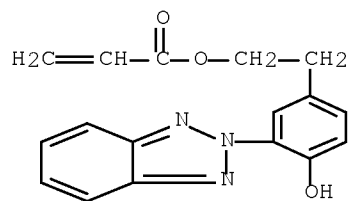
RN 374901-41-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate and 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 170103-27-2

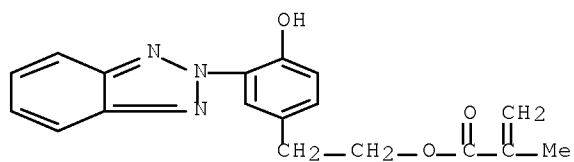
CMF C17 H15 N3 O3



CM 2

CRN 96478-09-0

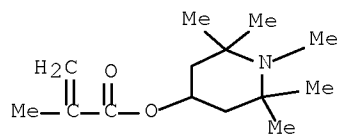
CMF C18 H17 N3 O3



CM 3

CRN 68548-08-3

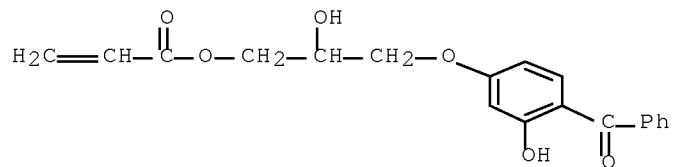
CMF C14 H25 N O2



CM 4

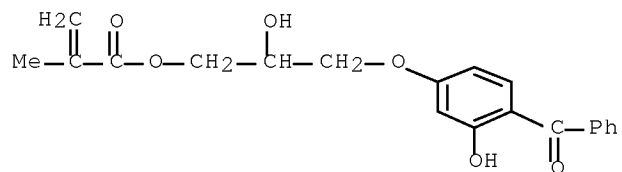
CRN 1843-07-8

CMF C19 H18 O6



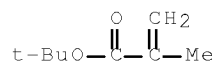
CM 5

CRN 1823-18-3
 CMF C20 H20 O6



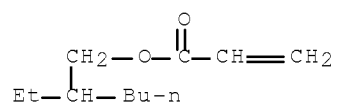
CM 6

CRN 585-07-9
 CMF C8 H14 O2



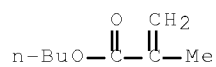
CM 7

CRN 103-11-7
 CMF C11 H20 O2



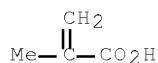
CM 8

CRN 97-88-1
 CMF C8 H14 O2



CM 9

CRN 79-41-4
CMF C4 H6 O2



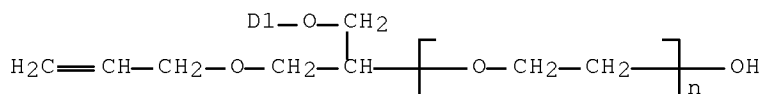
RN 374901-42-5 HCAPLUS
CN 4-Cyclohexene-1,2-dicarboxylic acid,
mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
1,1-dimethylethyl 2-propenoate, 2-ethylhexyl 2-propenoate, methyl
2-methyl-2-propenoate, α -[1-[(nonylphenoxy)methyl]-2-(2-
propenyloxy)ethyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) and
2,2,6,6-tetramethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX
NAME)

CM 1

CRN 111144-60-6
CMF (C2 H4 O)_n C21 H34 O3
CCI IDS, PMS

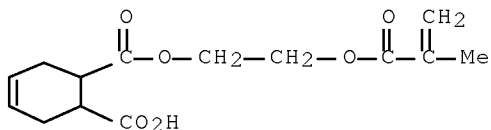


D1—(CH₂)₈—Me



CM 2

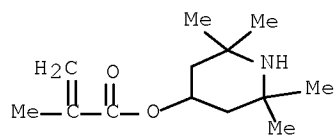
CRN 63306-05-8
CMF C14 H18 O6



CM 3

CRN 31582-45-3

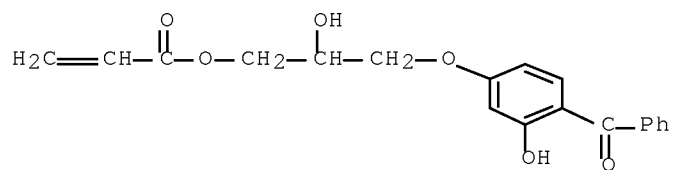
CMF C13 H23 N O2



CM 4

CRN 1843-07-8

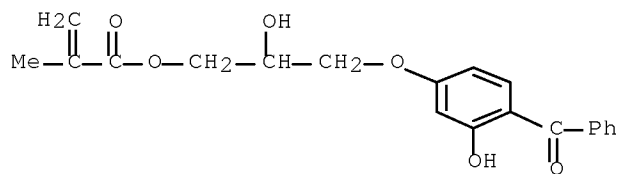
CMF C19 H18 O6



CM 5

CRN 1823-18-3

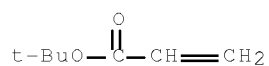
CMF C20 H20 O6



CM 6

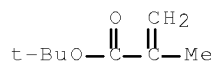
CRN 1663-39-4

CMF C7 H12 O2



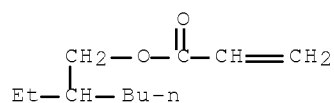
CM 7

CRN 585-07-9
 CMF C8 H14 O2



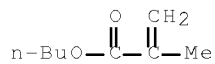
CM 8

CRN 103-11-7
 CMF C11 H20 O2



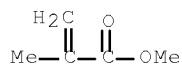
CM 9

CRN 97-88-1
 CMF C8 H14 O2



CM 10

CRN 80-62-6
 CMF C5 H8 O2



RN 374901-45-8 HCAPLUS

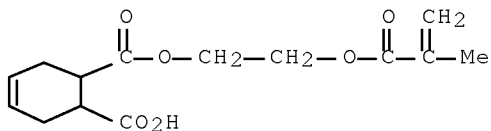
CN 4-Cyclohexene-1,2-dicarboxylic acid,
 mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl

2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
 1,1-dimethylethyl 2-propenoate, 2-ethylhexyl 2-propenoate,
 2-methyl-2-propenoic acid and 2,2,6,6-tetramethyl-4-piperidiny1
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 63306-05-8

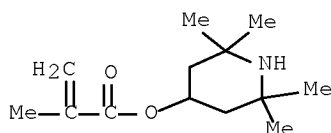
CMF C14 H18 O6



CM 2

CRN 31582-45-3

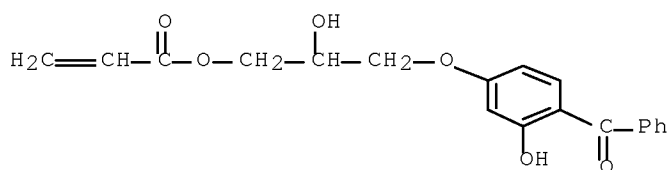
CMF C13 H23 N O2



CM 3

CRN 1843-07-8

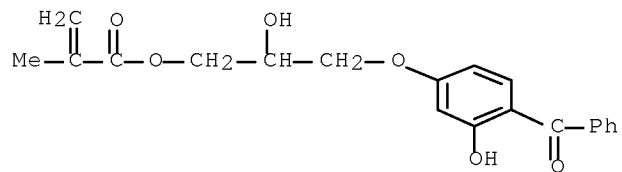
CMF C19 H18 O6



CM 4

CRN 1823-18-3

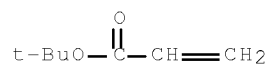
CMF C20 H20 O6



CM 5

CRN 1663-39-4

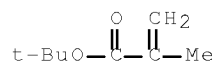
CMF C7 H12 O2



CM 6

CRN 585-07-9

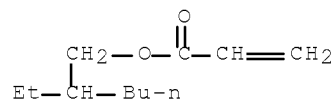
CMF C8 H14 O2



CM 7

CRN 103-11-7

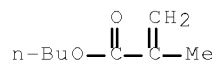
CMF C11 H20 O2



CM 8

CRN 97-88-1

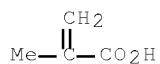
CMF C8 H14 O2



CM 9

CRN 79-41-4

CMF C4 H6 O2



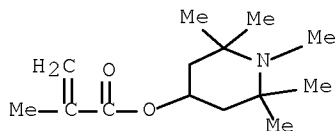
RN 374901-46-9 HCAPLUS

CN 4-Cyclohexene-1,2-dicarboxylic acid,
 mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate,
 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate,
 2-methyl-2-propenoic acid and 1,2,2,6,6-pentamethyl-4-piperidiny1
 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 68548-08-3

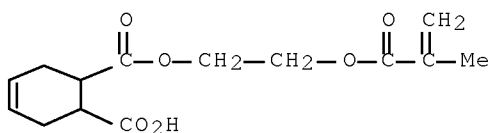
CMF C14 H25 N O2



CM 2

CRN 63306-05-8

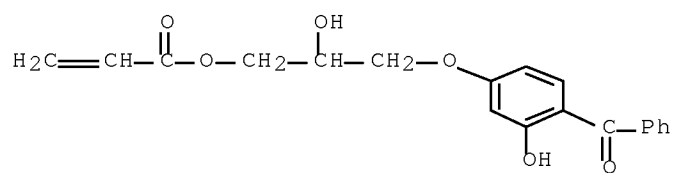
CMF C14 H18 O6



CM 3

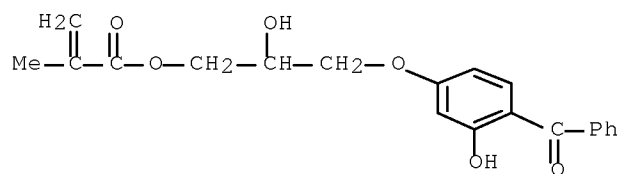
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CMF C19 H18 O6



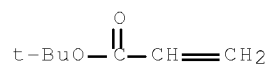
CM 4

CRN 1823-18-3
CMF C20 H20 O6



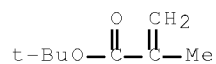
CM 5

CRN 1663-39-4
CMF C7 H12 O2



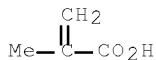
CM 6

CRN 585-07-9
CMF C8 H14 O2



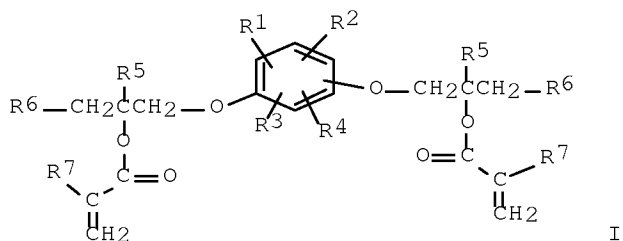
CM 7

CRN 79-41-4
CMF C4 H6 O2



L57 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:603582 HCAPLUS Full-text
 DOCUMENT NUMBER: 135:181670
 TITLE: (Meth)acrylate ester compositions and their cured products and optical parts with good mechanical properties
 INVENTOR(S): Imai, Masao; Sugimoto, Kenichi; Okuma, Tadashi; Takagi, Masatoshi; Fujii, Kenichi; Otsuji, Atsuo
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001226438	A	20010821	JP 2000-41496	20000218
PRIORITY APPLN. INFO.: GI			JP 2000-41496	20000218



AB The compns., useful for optical lenses, eyeglasses, etc., comprise monomers containing S-containing (meth)acrylate esters I (R1-R4 = H, alkyl, alkoxy, nitro, halo; R5 = H, alkyl; R6 = S-containing substituent; R7 = H, Me) and OH-containing (meth)acrylate esters and polymerization initiators. Thus, monomers containing I [R1-R4, R5, R7 = H; R6 = 2-(1,3-dithiolan-4-yl)ethylthio], resorcinol diglycidyl ether diacrylate, tetracyclo[4.4.0.12,5.17,10]dodecyl acrylate, and ethylene glycol dimethacrylate were UV-irradiated in the presence of 2-hydroxy-2-methyl-1-phenylpropan-1-one in a mold to give a colorless transparent lens showing reflective index 1.595, Abbe's number 41.0, Tg 90°, and good impact resistance.

IT 355129-62-3P 355129-63-4P

RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

((meth)acrylate ester compns. for optical lens with good mech. properties)

RN 355129-62-3 HCAPLUS

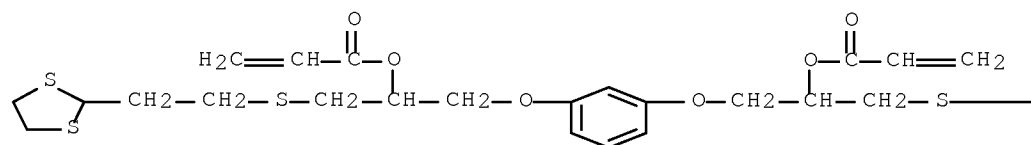
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with 1,3-phenylenebis[oxy[1-[[[2-(1,3-dithiolan-2-yl)ethyl]thio]methyl]-2,1-ethanediyl]] di-2-propenoate and 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

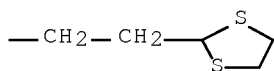
CRN 355129-59-8

CMF C28 H38 O6 S6

PAGE 1-A



PAGE 1-B

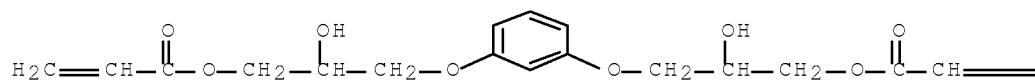


CM 2

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A

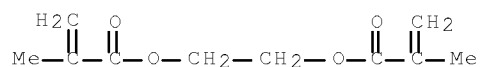


PAGE 1-B



CM 3

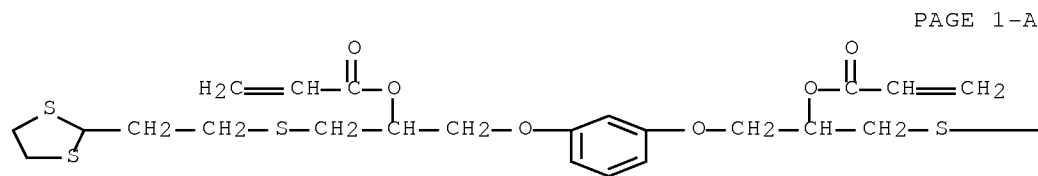
CRN 97-90-5
CMF C10 H14 O4



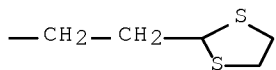
RN 355129-63-4 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, (2,4,6-trioxo-1,3,5-triazine-1,3,5(2H,4H,6H)-
triy1)tri-2,1-ethanediyl ester, polymer with 1,2-ethanediyl
bis(2-methyl-2-propenoate), 1,3-phenylenebis[oxy[1-[[[2-(1,3-dithiolan-2-
yl)ethyl]thio]methyl]-2,1-ethanediyl]] di-2-propenoate and
1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] di-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 355129-59-8
CMF C28 H38 O6 S6

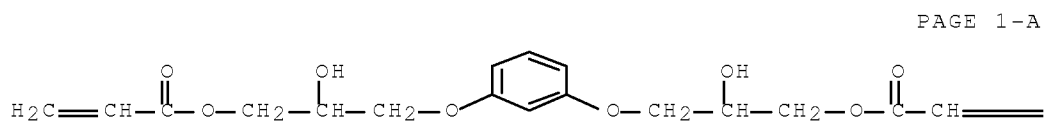


PAGE 1-B



CM 2

CRN 126659-18-5
CMF C18 H22 O8

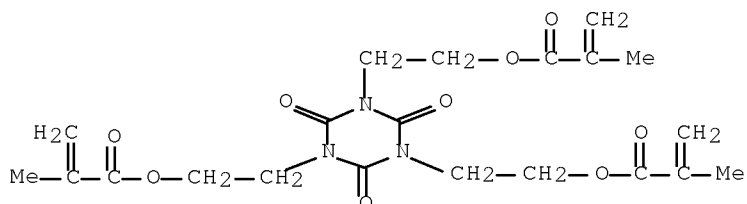




CM 3

CRN 35838-12-1

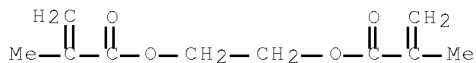
CMF C21 H27 N3 O9



CM 4

CRN 97-90-5

CMF C10 H14 O4



L57 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:479864 HCAPLUS Full-text
 DOCUMENT NUMBER: 135:78277
 TITLE: Storage-stable aqueous acrylic coating compositions
 with good adhesion to other resin coatings
 INVENTOR(S): Tanaka, Motomi; Fukizumi, Tatsushi; Ito, Takaaki
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2001181555	A	20010703	JP 1999-366358	19991224
PRIORITY APPLN. INFO.:			JP 1999-366358	19991224

AB Title compns., also showing good soil, water, and weather resistance, comprise polyhydrazines and polymers pred. from CH₂:C(R)COOC(CH₃)₃ (R = H or C1-2 alkyl) 5-80, UV-absorbing ethylenic unsatd. compds. 0.1-10, ethylenic unsatd. carboxylic acids 0.1-10, CO- or CHO-containing ethylenic unsatd. compds. 0.5-10, and other ethylenic unsatd. compds. 0-94.3%. An aqueous composition containing adipic dihydrazide and Bu methacrylate-tert-Bu methacrylate-diacetone acrylamide-2-ethylhexyl acrylate-methacrylic acid-2-(2'-Hydroxy-5'-acryloxyethylphenyl)-2H-benzotriazole-2-(2'-Hydroxy- 5'-methacryloxyethylphenyl)-2H-benzotriazole-Adeka Reasoap NE 40 copolymer showed no precipitation after storing at 40° for 168 h then at room temperature for 1 mo and formed into films with good adhesion to Lumiflon FE 4000 or acrylic emulsion coatings, soil (outdoor, 6 mo), water, and weather resistance.

IT 346432-98-2P 346432-99-3P 346433-02-1P

346433-03-2P 346433-04-3P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (aqueous tert-Bu (meth)acrylate resin coatings with adhesion to other resin coatings)

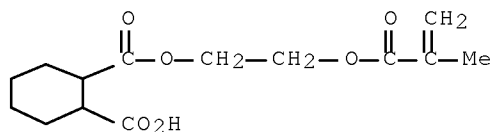
RN 346432-98-2 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate, 1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and hexanedioic acid dihydrazide (9CI) (CA INDEX NAME)

CM 1

CRN 51252-88-1

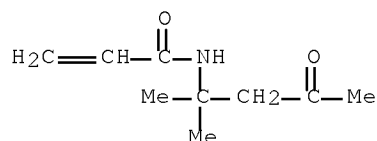
CMF C14 H20 O6



CM 2

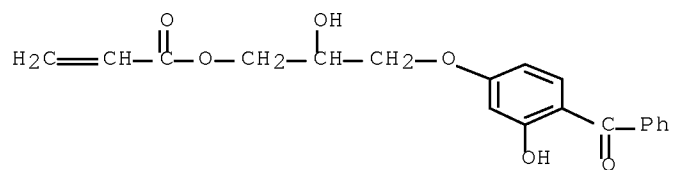
CRN 2873-97-4

CMF C9 H15 N O2



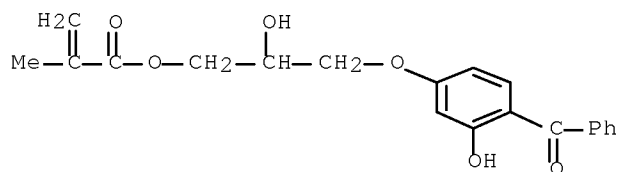
CM 3

CRN 1843-07-8
 CMF C19 H18 O6



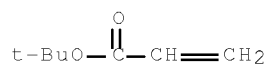
CM 4

CRN 1823-18-3
 CMF C20 H20 O6



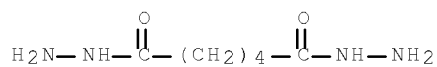
CM 5

CRN 1663-39-4
 CMF C7 H12 O2



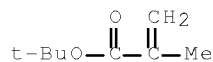
CM 6

CRN 1071-93-8
 CMF C6 H14 N4 O2



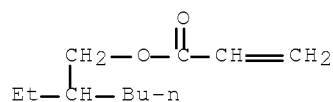
CM 7

CRN 585-07-9
CMF C8 H14 O2



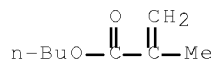
CM 8

CRN 103-11-7
CMF C11 H20 O2



CM 9

CRN 97-88-1
CMF C8 H14 O2

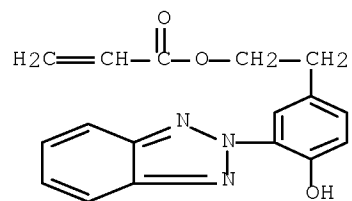


RN 346432-99-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with
2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate,
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide,
2-ethylhexyl 2-propenoate, hexanedioic acid dihydrazide and
2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

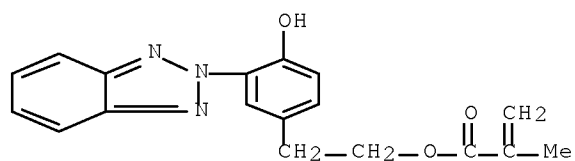
CRN 170103-27-2
CMF C17 H15 N3 O3



CM 2

CRN 96478-09-0

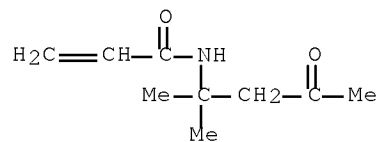
CMF C18 H17 N3 O3



CM 3

CRN 2873-97-4

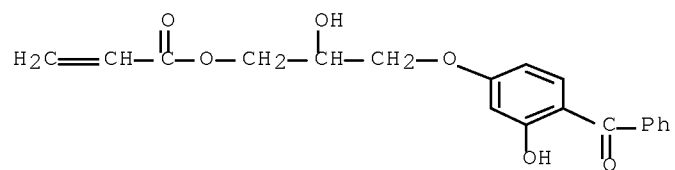
CMF C9 H15 N O2



CM 4

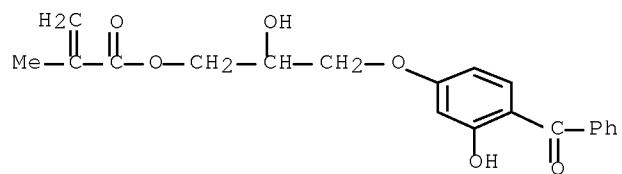
CRN 1843-07-8

CMF C19 H18 O6



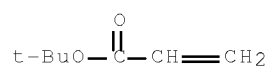
CM 5

CRN 1823-18-3
 CMF C20 H20 O6



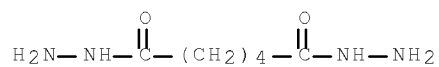
CM 6

CRN 1663-39-4
 CMF C7 H12 O2



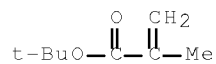
CM 7

CRN 1071-93-8
 CMF C6 H14 N4 O2



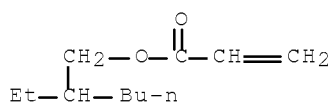
CM 8

CRN 585-07-9
 CMF C8 H14 O2



CM 9

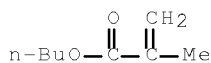
CRN 103-11-7
 CMF C11 H20 O2



CM 10

CRN 97-88-1

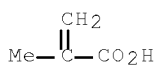
CMF C8 H14 O2



CM 11

CRN 79-41-4

CMF C4 H6 O2



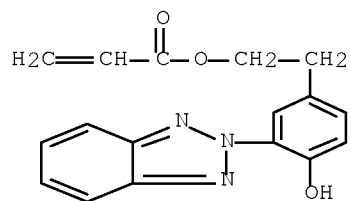
RN 346433-02-1 HCAPLUS

CN Hexanedioic acid, dihydrazide, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate,
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
 N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate,
 2-methyl-2-propenoic acid and α -[1-[(nonylphenoxy)methyl]-2-(2-
 propenyloxy)ethyl]- ω -hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA
 INDEX NAME)

CM 1

CRN 170103-27-2

CMF C17 H15 N3 O3

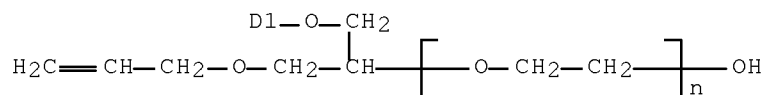


CM 2

CRN 111144-60-6

CMF (C2 H4 O)_n C21 H34 O3

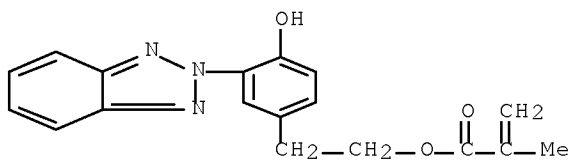
CCI IDS, PMS

D1—(CH₂)₈—Me

CM 3

CRN 96478-09-0

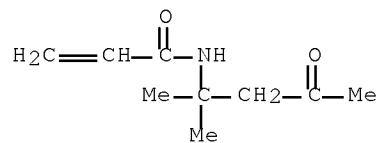
CMF C18 H17 N3 O3



CM 4

CRN 2873-97-4

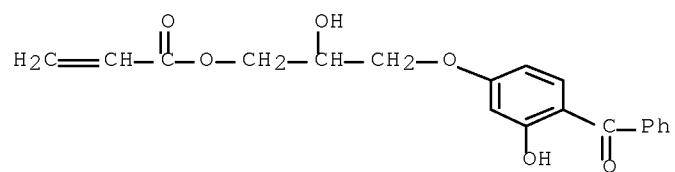
CMF C9 H15 N O2



CM 5

CRN 1843-07-8

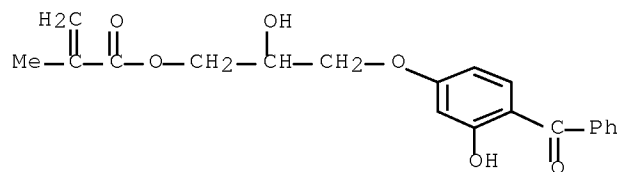
CMF C19 H18 O6



CM 6

CRN 1823-18-3

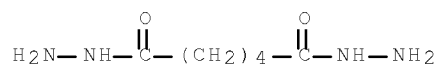
CMF C20 H20 O6



CM 7

CRN 1071-93-8

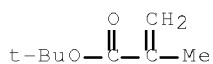
CMF C6 H14 N4 O2



CM 8

CRN 585-07-9

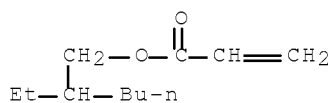
CMF C8 H14 O2



CM 9

CRN 103-11-7

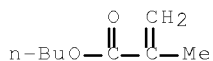
CMF C11 H20 O2



CM 10

CRN 97-88-1

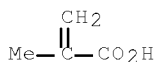
CMF C8 H14 O2



CM 11

CRN 79-41-4

CMF C4 H6 O2

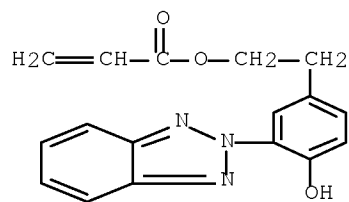


RN 346433-03-2 HCAPLUS

CN 1,2-Cyclohexanedicarboxylic acid, mono[2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl] ester, polymer with
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate,
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
 N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate and
 hexanedioic acid dihydrazide (9CI) (CA INDEX NAME)

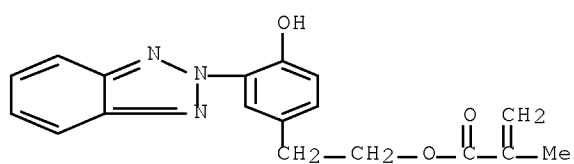
CM 1

CRN 170103-27-2
CMF C17 H15 N3 O3



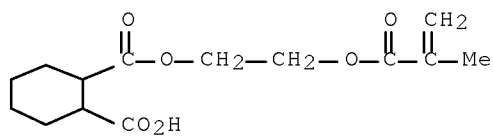
CM 2

CRN 96478-09-0
CMF C18 H17 N3 O3



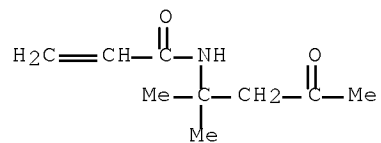
CM 3

CRN 51252-88-1
CMF C14 H20 O6



CM 4

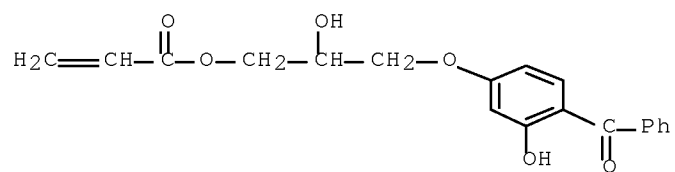
CRN 2873-97-4
CMF C9 H15 N O2



CM 5

CRN 1843-07-8

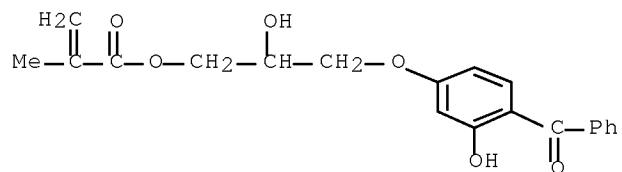
CMF C19 H18 O6



CM 6

CRN 1823-18-3

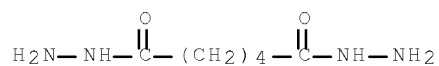
CMF C20 H20 O6



CM 7

CRN 1071-93-8

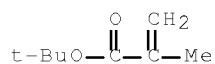
CMF C6 H14 N4 O2



CM 8

CRN 585-07-9

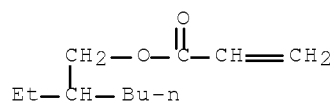
CMF C8 H14 O2



CM 9

CRN 103-11-7

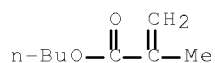
CMF C11 H20 O2



CM 10

CRN 97-88-1

CMF C8 H14 O2



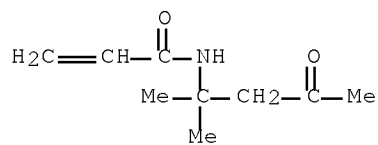
RN 346433-04-3 HCAPLUS

CN Hexanedioic acid, dihydrazide, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-methyl-2-propenoate,
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
 2-methyl-2-propenoate, 1,1-dimethylethyl 2-methyl-2-propenoate,
 1,1-dimethylethyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide
 and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

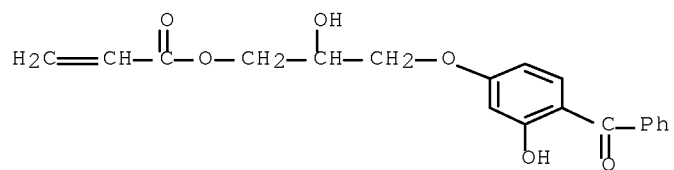
CRN 2873-97-4

CMF C9 H15 N O2



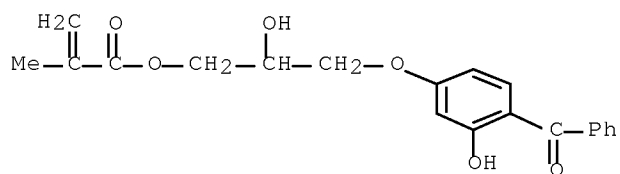
CM 2

CRN 1843-07-8
CMF C19 H18 O6



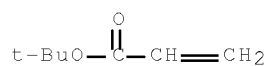
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CRN 1823-18-3
CMF C20 H20 O6



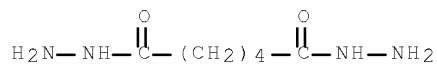
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CRN 1663-39-4
CMF C7 H12 O2



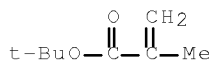
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CRN 1071-93-8
CMF C6 H14 N4 O2



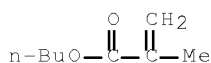
CM 6

CRN 585-07-9
CMF C8 H14 O2



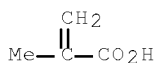
CM 7

CRN 97-88-1
CMF C8 H14 O2



CM 8

CRN 79-41-4
CMF C4 H6 O2



L57 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2001:328945 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:341661
 TITLE: Water-thinned acrylic coating compositions with good water and weather resistance
 INVENTOR(S): Tanaka, Motoki; Ito, Takaaki; Fukizumi, Tatsushi
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

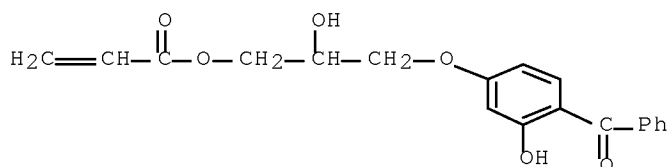
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001123105	A	20010508	JP 1999-302580	19991025
JP 4173261	B2	20081029		

PRIORITY APPLN. INFO.: JP 1999-302580 19991025

AB The compns. useful as topcoatings contain polymers prepared from (a) 5-80% H₂C:CR1CO₂CMe₃ (R₁ = H, C₁-2 alkyl), (b) 0.1-10% unsatd. monomers having UV-absorbing groups, (c) 0.1-10% unsatd. carboxylic acid monomers, and optionally (d) 0.1-94.8% other monomers. Thus, a topcoating containing 100 parts Bu methacrylate-2-ethylhexyl

acrylate-2-[2'-hydroxy-5'-(meth)acryloxyethylphenyl]-2H-benzotriazole-2-hydroxy-4-[3-(meth)acryloxy-2-hydroxypropoxy]benzophenone-2-methacryloyloxyethyl hexahydrophthalate-tert-Bu methacrylate copolymer ammonium salt and 5 parts Adeka Reasoap NE 40 (nonionic emulsifier) showed good storage stability and adhesion to fluoropolymer and acrylic undercoatings.

IT 1843-07-8DP, polymers with (meth)acrylates, ammonium salt
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (water-thinned acrylic coating compns. with good water and weather resistance)
 RN 1843-07-8 HCAPLUS
 CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester (CA INDEX NAME)

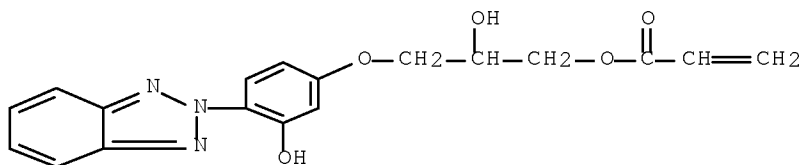


L57 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2000:776690 HCAPLUS Full-text
 DOCUMENT NUMBER: 134:42467
 TITLE: Functional polymers 64. Potassium ionization of desorbed species (K+IDS) of 2-(2-hydroxyphenyl)-2H-benzotriazoles
 AUTHOR(S): Stoeber, Lutz; Sustic, Andres; Simonsick, William J., Jr.; Vogl, Otto
 CORPORATE SOURCE: Six Metrotech Center, Polytechnic University, Brooklyn, NY, 11201, USA
 SOURCE: Journal of Macromolecular Science, Pure and Applied Chemistry (2000), A37(11), 1269-1300
 CODEN: JSPCE6; ISSN: 1060-1325
 PUBLISHER: Marcel Dekker, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Mass spectrometry using the potassium ionization of desorbed species (K+IDS) technique was found to be an unusually fruitful method to characterize 2-(2-hydroxyphenyl)-2H-benzotriazole derivs. This class of compds. has the proper mol. weight range of 200 up to more than 1000 daltons (Da) and the proper volatility to show readily desirable concns. in the mass spectrometer. This class of compds. is stable under the conditions of measurement which allows the determination of their purity. 2-(2-Hydroxyphenyl)2H-benzotriazoles have recently been used most extensively for the UV stabilization of polymeric materials. In this work, over 100 2-(2-hydroxyphenyl)-2H-benzotriazoles have been characterized by K+IDS mass spectrometry.

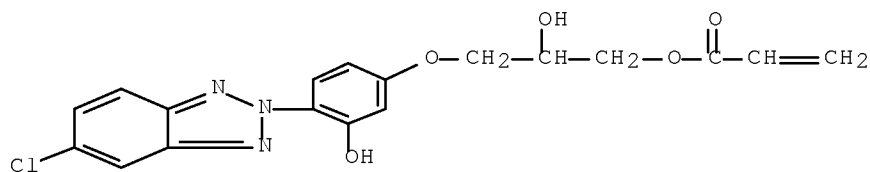
IT 25177-21-3 313071-04-4 313071-05-5
 RL: ANT (Analyte); ANST (Analytical study)
 (potassium ionization of desorbed species of 2-(2-hydroxyphenyl)-2H-benzotriazoles for determination of mol. weight)
 RN 25177-21-3 HCAPLUS

CN 2-Propenoic acid, 3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



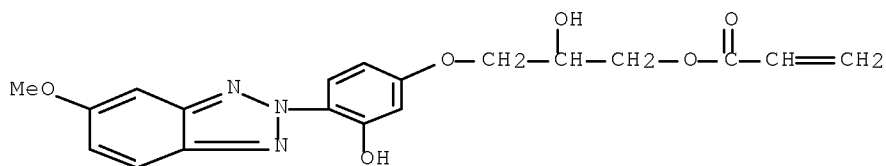
RN 313071-04-4 HCAPLUS

CN 2-Propenoic acid, 3-[4-(5-chloro-2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



RN 313071-05-5 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-3-[3-hydroxy-4-(5-methoxy-2H-benzotriazol-2-yl)phenoxy]propyl ester (CA INDEX NAME)



REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:708469 HCAPLUS Full-text

DOCUMENT NUMBER: 131:337848

TITLE: UV light-stabilized polyester molding composition

INVENTOR(S): Mulholland, Bruce M.

PATENT ASSIGNEE(S): Hoechst Celanese Corporation, USA

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

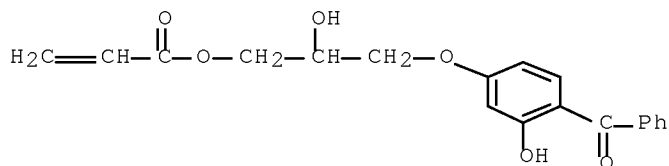
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 953595	A1	19991103	EP 1998-303247	19980427
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			EP 1998-303247	19980427
AB A UV stabilized thermoplastic polyester molding composition is characterized as containing a polyester and a UV light stabilizing system characterized as an effective amount of a hindered amine, a benzotriazole or benzophenone compound, and an antioxidant to achieve acceptable UV exposure results when the composition is exposed in a Xenon arc weatherometer operated according to SAE J1885. The composition and molded parts therefrom exhibit improved color difference, as calculated in CIELab units under illumination "D-65" according to ASTM Standard D-2244, of less than about 2.20 when exposed to 601.6 kJ/m2 irradiation, and improved surface gloss retention characteristics after exposure and are useful for automobiles.				
IT 1843-07-8				
RL: MOA (Modifier or additive use); USES (Uses) (UV light-stabilized polyester molding comps. containing hindered amines, benzotriazole or benzophenone derivs., and antioxidants for automobiles)				
RN 1843-07-8 HCAPLUS				
CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester (CA INDEX NAME)				



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1999:421171 HCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 131:74460
 TITLE: Weather- and coloration-resistant polymers
 INVENTOR(S): Tobita, Etsuo; Nanbu, Yoko; Ishikawa, Shinichi; Ayabe, Keishi
 PATENT ASSIGNEE(S): Asahi Denka Kogyo K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

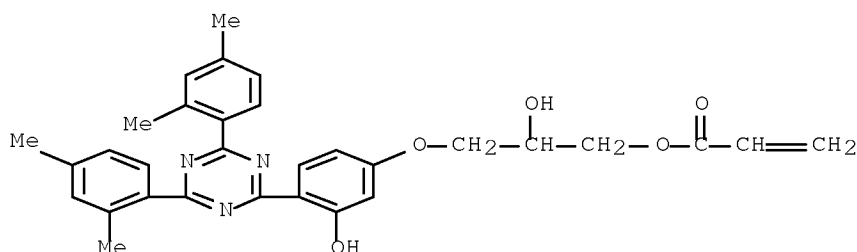
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11181304	A	19990706	JP 1998-265870	19980921
JP 4014184	B2	20071128		
PRIORITY APPLN. INFO.:			JP 1997-294827	A 19971013
OTHER SOURCE(S):			MARPAT 131:74460	

AB Polymers (100 parts) contain 0.001-10 parts triaryltriazines having (meth)acryloyloxy groups, such as 2-(2-hydroxy-4-(2-methacryloyloxyethoxy)phenyl)-4,6-diphenyl-s-triazine (I). Thus, 100 parts bisphenol A polycarbonate (II) containing 10 parts I and II were coextruded to prepare a laminate.

IT 228700-82-1
 RL: MOA (Modifier or additive use); USES (Uses)
 (polymers containing triaryltriazines having (meth)acryloyloxy groups as UV absorbers)

RN 228700-82-1 HCAPLUS

CN 2-Propenoic acid, 3-[4-[4,6-bis(2,4-dimethylphenyl)-1,3,5-triazin-2-yl]-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



L57 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:195633 HCAPLUS Full-text

DOCUMENT NUMBER: 126:186873

ORIGINAL REFERENCE NO.: 126:36079a,36082a

TITLE: Polyester compositions and films with good slipperiness and abrasion resistance for magnetic recording materials

INVENTOR(S): Aoyama, Masatoshi; Kojima, Hiroji; Suzuki, Masaru

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 755975	A2	19970129	EP 1996-305450	19960725
EP 755975	A3	19971008		
EP 755975	B1	20020320		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, NL, PT, SE				
JP 09095601	A	19970408	JP 1996-180837	19960710
JP 3629822	B2	20050316		
TW 412567	B	20001121	TW 1996-85108634	19960716
US 5912074	A	19990615	US 1996-682954	19960718
CA 2182143	A1	19970128	CA 1996-2182143	19960726
CN 1150163	A	19970521	CN 1996-112260	19960727
CN 1080285	C	20020306		

PRIORITY APPLN. INFO.: JP 1995-192317 A 19950727

AB A polyester composition comprises (a) a polyester component and (b) polymer particles (b). At least an outermost layer of the polymer particles (b) is a

polymer having hydroxyl groups. The composition can be made into a film especially suitable for use as a substrate in magnetic recording medium. Thus, poly(ethylene terephthalate) was compounded with particles (average particle size 0.5 μ) of bisphenol A dimethacrylate-styrene copolymer and laminated with poly(ethylene terephthalate) to give a film with thickness 1/13/1 μ , slipperiness 0.28 μ k, and exhibiting grade A abrasion resistance.

IT 187463-89-4F, Resorcinol diglycidyl ether diacrylate-styrene copolymer

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(particles having surface hydroxy groups; in polyester compns. with good properties for magnetic recording material substrates)

RN 187463-89-4 HCAPLUS

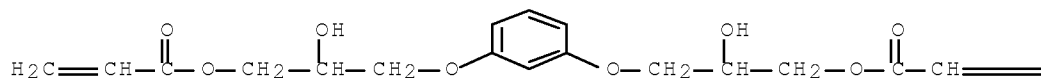
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5

CMF C18 H22 O8

PAGE 1-A



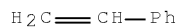
PAGE 1-B



CM 2

CRN 100-42-5

CMF C8 H8



L57 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:713559 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 126:60794

ORIGINAL REFERENCE NO.: 126:11935a,11938a

TITLE: Properties of radiation-cured epoxy-acrylic polymers

AUTHOR(S): Danilyuk, O. A.; Kuznetsova, V. M.; Tokar, M. I.; Zadontsev, B. G.; Neroznik, V. G.; Burmenko, A. S.;

Shiryaeva, G. V.
 CORPORATE SOURCE: Russia
 SOURCE: Plasticheskie Massy (1995), (2), 22-24
 CODEN: PLMSAI; ISSN: 0554-2901
 PUBLISHER: Khimiya
 DOCUMENT TYPE: Journal
 LANGUAGE: Russian

AB Acrylates and methacrylates of diglycidyl ethers/esters of oligomeric epichlorohydrin, p-hydroxybenzoic acid, resorcinol, phthalic acid, and poly(propylene glycol) methacrylate derivative (Akrol 633) were crosslinked radiochem. and thermal and mech. properties of the polymers were studied. Bu and cresyl glycidyl ether acrylates and triethylene glycol dimethacrylate were used as comonomers to modify polymer properties. High mech. strength was observed for the crosslinked epoxy (meth)acrylates.

IT 126659-19-6P, Resorcinol diglycidyl ether diacrylate homopolymer
 184845-25-8P, Butyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer 184845-27-0P, Resorcinol diglycidyl ether diacrylate-triethylene glycol dimethacrylate copolymer
 184923-31-7P, Cresyl glycidyl ether acrylate-resorcinol diglycidyl ether diacrylate copolymer
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
 (preparation and properties of radiation-cured epoxy-acrylic polymers)

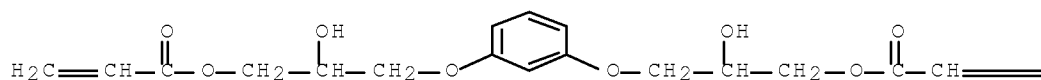
RN 126659-19-6 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
 CMF C18 H22 O8

PAGE 1-A



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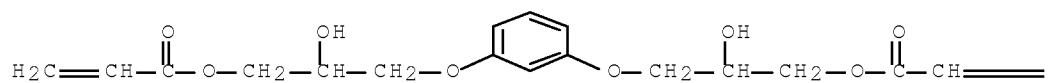
RN 184845-25-8 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with 3-butoxy-2-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5
 CMF C18 H22 O8

PAGE 1-A



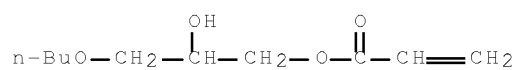
PAGE 1-B

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CM 2

CRN 13282-82-1

CMF C10 H18 O4



RN 184845-27-0 HCAPLUS

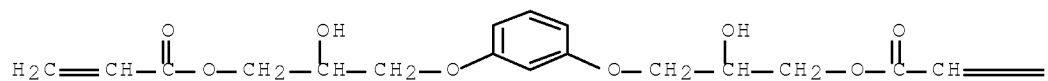
CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediylbis(oxy-2,1-ethanediyl) ester,
polymer with 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)]
di-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5

CMF C18 H22 O8

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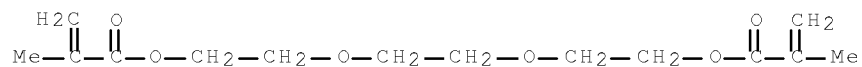
PAGE 1-B

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CM 2

CRN 109-16-0

CMF C14 H22 O6



RN 184923-31-7 HCAPLUS

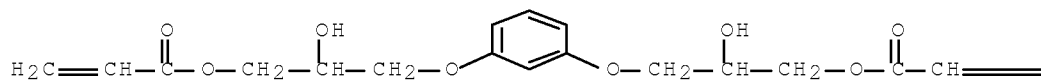
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester,
polymer with 2-hydroxy-3-(methylphenoxy)propyl 2-propenoate (9CI) (CA
INDEX NAME)

CM 1

CRN 126659-18-5

CMF C18 H22 O8

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CM 2

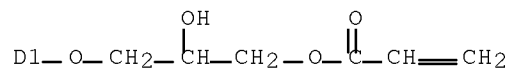
CRN 52484-31-8

CMF C13 H16 O4

CCI IDS



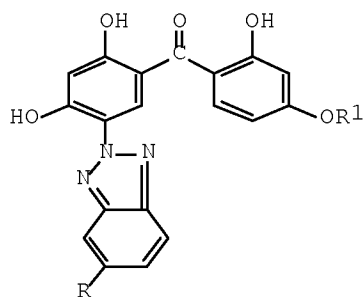
D1-Me



DOCUMENT NUMBER: 114:230105
 ORIGINAL REFERENCE NO.: 114:38827a, 38830a
 TITLE: UV-absorbing benzotriazolylbenzophenones and copolymerizable derivatives
 INVENTOR(S): Shuhaibar, Khamis; Rasoul, Firas A.
 PATENT ASSIGNEE(S): Kuwait Institute for Scientific Research, Kuwait
 SOURCE: Brit. UK Pat. Appl., 33 pp.
 CODEN: BAXXDU
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2232667	A	19901219	GB 1990-12548	19900605
PRIORITY APPLN. INFO.:			US 1989-362245	A 19890606
OTHER SOURCE(S):	MARPAT	114:230105		

GI



AB The title compds. I [R = H, halogen, alkoxy; R1 = H, (meth)acryloyl, allyl, γ -(acryloyloxy)- β -hydroxypropyl, β -hydroxyethyl] are prepared and polymerized. Thus, AIBN-initiated polymerization of 5-(2H-benzotriazole-2-yl)-2,2',4-trihydroxy-4'-(acryloyloxy)benzophenone in PhMe at 60° for 120 h gave a polymer (inherent viscosity 1.92 dL/g) useful as a UV stabilizer for polymer films.

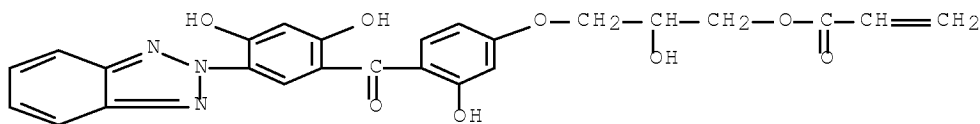
IT 133917-39-2P 133917-40-5P 133917-41-6P

RL: PREP (Preparation)

(preparation of, as UV stabilizer for plastics)

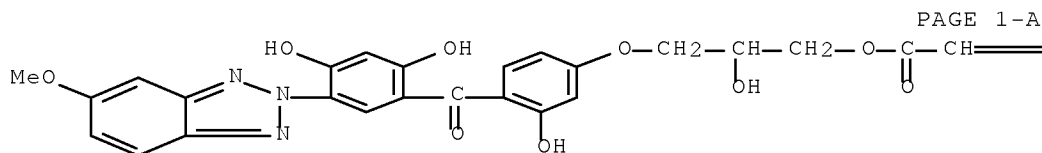
RN 133917-39-2 HCAPLUS

CN 2-Propenoic acid, 3-[4-[5-(2H-benzotriazol-2-yl)-2,4-dihydroxybenzoyl]-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



RN 133917-40-5 HCAPLUS

CN 2-Propenoic acid, 3-[4-[2,4-dihydroxy-5-(5-methoxy-2H-benzotriazol-2-yl)benzoyl]-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)

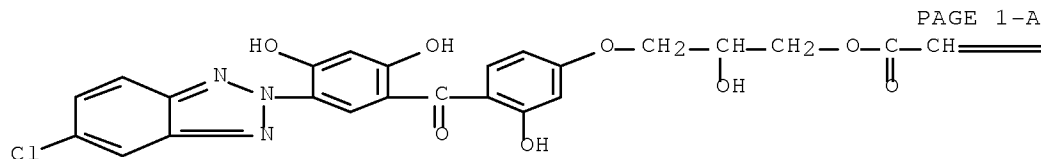


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RN 133917-41-6 HCAPLUS

CN 2-Propenoic acid, 3-[4-[5-(5-chloro-2H-benzotriazol-2-yl)-2,4-dihydroxybenzoyl]-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



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L57 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:592453 HCAPLUS Full-text

DOCUMENT NUMBER: 113:192453

ORIGINAL REFERENCE NO.: 113:32595a,32598a

TITLE: Gel chromatographic study of formation of epoxy acrylic compounds

AUTHOR(S): Neroznik, V. G.; Burmenko, A. S.; Yarovaya, E. P.

CORPORATE SOURCE: Ukr. Nauchno-Issled. Inst. Plast. Mass, USSR

SOURCE: Vysokomolekulyarnye Soedineniya, Seriya B: Kratkie Soobshcheniya (1990), 32(7), 514-16
CODEN: VYSBAI; ISSN: 0507-5483

DOCUMENT TYPE: Journal

LANGUAGE: Russian

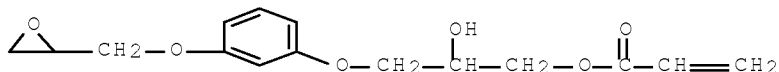
AB Reaction of resorcinol diglycidyl ether (I) with acrylic acid (II) occurred with sequential addition of II to each of the epoxy groups of I with formation of resorcinol diglycidyl ether monoacrylate (III) as an intermediate product. The final product contained resorcinol diglycidyl ether diacrylate 77, III 5-

10, and oligomeric byproducts (d.p. 2-6) 18-20%. The oligomeric byproducts were formed in the beginning of the esterification at high I concentration

IT 130287-34-2P, Resorcinol diglycidyl ether monoacrylate
 RL: FORM (Formation, nonpreparative); PREP (Preparation)
 (formation of, in esterification of resorcinol diglycidyl ether with acrylic acid)

RN 130287-34-2 HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-3-[3-(2-oxiranylmethoxy)phenoxy]propyl ester
 (CA INDEX NAME)

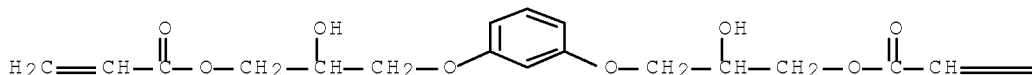


IT 126659-18-5P, Resorcinol diglycidyl ether diacrylate
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, from resorcinol diglycidyl ether and acrylic acid, side reactions and byproducts in)

RN 126659-18-5 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester
 (9CI) (CA INDEX NAME)

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PAGE 1-B

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L57 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:516347 HCAPLUS Full-text

DOCUMENT NUMBER: 113:116347

ORIGINAL REFERENCE NO.: 113:19737a,19740a

TITLE: Synthesis and properties of epoxy acrylates based on diglycidyl ether of resorcinol

AUTHOR(S): Neroznik, V. G.; Burmenko, A. S.; Karpov, O. N.

CORPORATE SOURCE: USSR

SOURCE: Plasticheskie Massy (1990), (4), 19-22

CODEN: PLMSAI; ISSN: 0554-2901

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Esterification of acrylic acid (I) with resorcinol diglycidyl ether (II) at 100° for 12 h in the absence of a catalyst led to formation of the corresponding acrylate in a relatively low (≤65%) yield. The reaction was 1st

order and the reaction rate was 8.6×10^{-6} L/mol-s. Esterification of I with II or epichlorohydrin-resorcinol oligomer at elevated temperature for 8-10 h in the presence of 2,4,6-tris(dimethylaminomethyl)phenol (III) led to formation of the corresponding acrylates in .apprx.94-96% yield. Although the theor. order of the reaction in the presence of III was 1, exptl. data did not support this. This finding was explained by simultaneous occurrence of esterification reactions according to 1st and 2nd order kinetics. The obtained epoxy acrylates were characterized by IR spectroscopy and NMR.

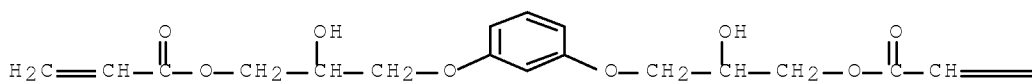
IT 126659-18-5P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and structure of)

RN 126659-18-5 HCAPLUS

CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester
(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

=CH₂

L57 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:484646 HCAPLUS Full-text

DOCUMENT NUMBER: 113:84646

ORIGINAL REFERENCE NO.: 113:14189a,14192a

TITLE: UV-absorbing microspheric (meth)acrylate copolymers
for sunscreens and their preparation

INVENTOR(S): Shiraishi, Takeshi; Mizuno, Mayumi; Otani, Hitomi;
Yamakado, Nagahiko; Hata, Hironori

PATENT ASSIGNEE(S): Natao Patin Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

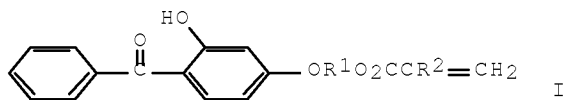
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 02091109	A	19900330	JP 1988-243694	19880927
JP 2784773	B2	19980806		
PRIORITY APPLN. INFO.:			JP 1988-243694	19880927
GI				



AB UV-absorbing microspheric copolymers are prepared by copolyng. (meth)acrylates I [R1 = (un)substituted alkylene; R2 = H, alkyl] with vinyl monomers in (i) solvents which dissolve the monomers but not the resulting copolymers or (ii) aqueous solns., in which microspheric polymers and their swelling agents are dispersed, with absorbing the monomers into the swelled polymers. The copolymers are not absorbed into bodies, thus showing no skin irritation. Sunscreens containing the copolymers are smoothly applied to the skin, since the copolymers are perfect spheres. Poly(vinylpyrrolidone) 4, I (R1 = ethylene, R2 = Me) 2.8, styrene 28, and Bz2O2 0.3 parts were mixed at 70° for 24 h in Me2CHOH to give perfect spherical copolymer (II). Sunscreen powder was prepared from II 15.0, talc 50.0, TiO2 18.0, Fe oxide 10.0, stearic acid 2.0, lanolin fatty acid 2.0, squalane 3.0 weight parts, and perfume.

IT 128674-97-5P

RL: PREP (Preparation)

(microspheric, preparation of, sunscreens containing)

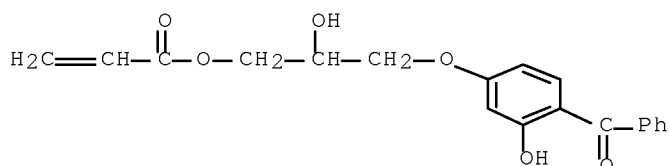
RN 128674-97-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate and ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8

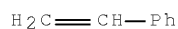
CMF C19 H18 O6



CM 2

CRN 100-42-5

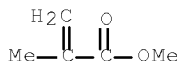
CMF C8 H8



CM 3

CRN 80-62-6

CMF C5 H8 O2



L57 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1990:199796 HCAPLUS Full-text

DOCUMENT NUMBER: 112:199796

ORIGINAL REFERENCE NO.: 112:33789a,33792a

TITLE: Thermal stability of radiation-cured epoxyacrylate polymers

AUTHOR(S): Danilyuk, O. A.; Kuznetsova, V. M.; Tokar, M. I.; Zadontsev, B. G.; Neroznik, V. G.; Burmenko, A. S.

CORPORATE SOURCE: USSR

SOURCE: Plasticheskie Massy (1989), (11), 56-8

CODEN: PLMSAI; ISSN: 0554-2901

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The effect of chemical structure and functionality of oligomers, monomers, and modifying additives on thermal stability of radiochem. cured epoxy-acrylate polymers was studied. The radiochem. cured epoxy-acrylate composites can be used as sealants and impregnating materials. The epoxy-acrylate polymers were made from acrylated and methacrylated bisphenol A diglycidyl ether, resorcinol diglycidyl ether, p-hydroxybenzoic acid glycidyl ester, phthalic acid diglycidyl ester, polyepichlorohydrin diglycidyl ether, tetrabromodiphenylolpropane diglycidyl ether, and N,N-glycidyltetrabromoaniline. Technol. properties were controlled by monomeric cresyl glycidyl ether acrylate, Bu glycidyl ether acrylate, triethylene glycol dimethacrylate, organosilicon blend copolymer, and 1-acryloyl-3-butoxy-2-Pr phosphate.

IT 126659-19-6

RL: USES (Uses)

(radiochem. curing, thermal stability in relation to)

RN 126659-19-6 HCAPLUS

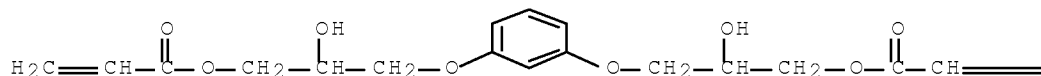
CN 2-Propenoic acid, 1,3-phenylenebis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 126659-18-5

CMF C18 H22 O8

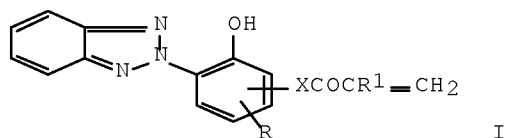
PAGE 1-A



=CH₂

L57 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1989:194760 HCAPLUS Full-text
 DOCUMENT NUMBER: 110:194760
 ORIGINAL REFERENCE NO.: 110:32337a,32340a
 TITLE: Benzotriazole light stabilizers for thermosetting resin coatings
 INVENTOR(S): Yagi, Masaki; Nakahara, Yutaka; Takatori, Katsuyuki; Nakajima, Toshio
 PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63205334	A	19880824	JP 1987-36935	19870220
PRIORITY APPLN. INFO.: GI			JP 1987-36935	19870220



AB Title stabilizers are composed of benzotriazoles I [R = H, alkyl; R₁ = H, Me; X = O, CH₂NH, OCH₂CH₂O, OCH₂CH(OH)CH₂O, CH₂O, CH₂CH₂O, CH₂CH₂CO₂CH₂CH₂O, CH₂CH₂CO₂CH₂CH(OH)CH₂O]. A primed steel plate was sprayed with a base coating composition containing Bu acrylate (II)-2-hydroxyethyl methacrylate (III)-methacrylic acid (IV)-Me methacrylate (V) copolymer, U-Van 20SE60, cellulose acetate butyrate, Alpaste 1123N, xylene, AcOBu, and Cu phthalocyanine blue, left for 10 min, sprayed with a top coating composition containing II-III-IV-V-[2-hydroxy-3-(acryloylaminomethyl)-5-methylphenyl]benzotriazole (VI) copolymer, U-Van 20SE60, xylene, and Bu glycol acetate, and baked 30 min at 140° to form a coating, which cracked after 2500 h in weather-o-meter test, vs., 1600 for the coating prepared without VI.

IT 120303-74-4

RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings, weather-resistant)

RN 120303-74-4 HCAPLUS

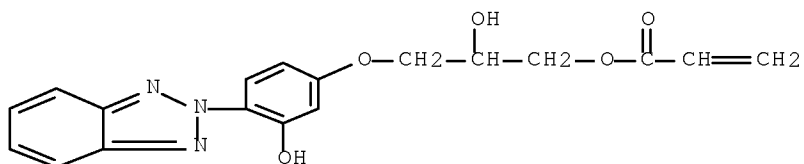
CN 2-Propenoic acid, 2-methyl-, polymer with
 3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl

2-propenoate, butyl 2-propenoate, formaldehyde, 2-hydroxyethyl
2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and
1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 25177-21-3

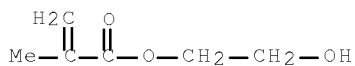
CMF C18 H17 N3 O5



CM 2

CRN 868-77-9

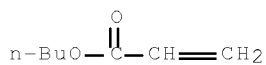
CMF C6 H10 O3



CM 3

CRN 141-32-2

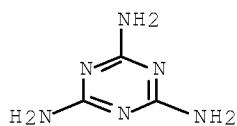
CMF C7 H12 O2



CM 4

CRN 108-78-1

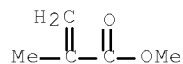
CMF C3 H6 N6



CM 5

CRN 80-62-6

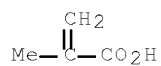
CMF C5 H8 O2



CM 6

CRN 79-41-4

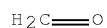
CMF C4 H6 O2



CM 7

CRN 50-00-0

CMF C H2 O



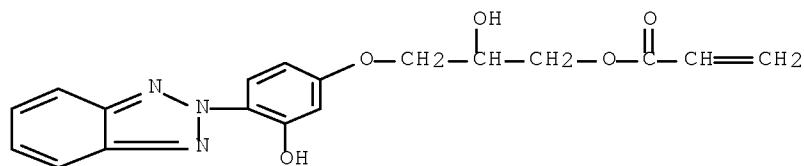
IT 25177-21-3

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, with melamine resins, for coconut oil-modified alkyd resin coatings, weather-resistant)

RN 25177-21-3 HCAPLUS

CN 2-Propenoic acid, 3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



L57 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

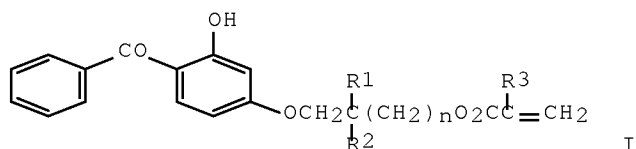
ACCESSION NUMBER: 1989:76741 HCAPLUS Full-text

DOCUMENT NUMBER: 110:76741

ORIGINAL REFERENCE NO.: 110:12696h,12697a
 TITLE: Benzophenone light stabilizers for heat-curable resin coatings
 INVENTOR(S): Yagi, Masaki; Nakahara, Yutaka; Takatori, Katsuyuki; Nakajima, Toshio
 PATENT ASSIGNEE(S): Adeka Argus Chemical Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63139958	A	19880611	JP 1986-287436	19861202
PRIORITY APPLN. INFO.:			JP 1986-287436	19861202
OTHER SOURCE(S):	MARPAT	110:76741		

GI



AB Benzophenone derivs. I (R1 = H, alkyl; R2 = H, OH; R3 = H, Me; n = 0-1) are useful as light stabilizers for heat-curable resin coatings. Thus, a primer-coated steel plate was sprayed with a base coat composed of 50% solution of 66:30:4:100 Bu acrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer (II) 12, U-Van 20SE60 (60% solid) 2.5, cellulose acetate butyrate 50, Alpaste 1123N 5.5, xylene 10, BuOAc 20, and Cu phthalocyanine blue 0.2 part, left for 10 min, sprayed with a topcoat composed of 50% solution of II containing I (R1, R2 = H, R3 = Me, n = 0) (III) (added 2 g per 100 g Me methacrylate during polymerization) 48, U-Van 20SE60 10, xylene 10, and Bu glycol acetate 4 parts, left for 15 min, and then baked at 140° for 30 min. The specimen showed cracking after 2400 h in weatherometer, while a control without III showed cracking after 1600 h.

IT 118777-76-7 118864-24-7

RL: TEM (Technical or engineered material use); USES (Uses)
 (coatings)

RN 118777-76-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
 2-propenoate, ethenylbenzene, 2-ethylhexyl 2-methyl-2-propenoate,
 formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, Mark EP 13, methyl
 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX
 NAME)

CM 1

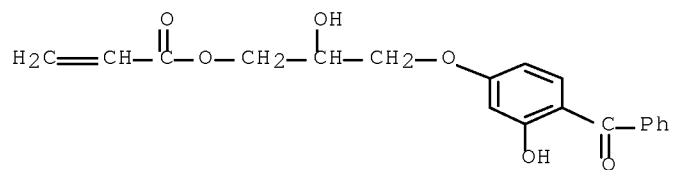
CRN 77537-89-4
 CMF Unspecified
 CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 1843-07-8

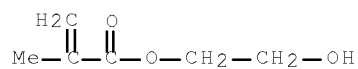
CMF C19 H18 O6



CM 3

CRN 868-77-9

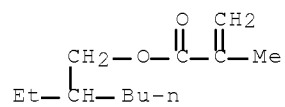
CMF C6 H10 O3



CM 4

CRN 688-84-6

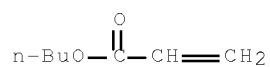
CMF C12 H22 O2



CM 5

CRN 141-32-2

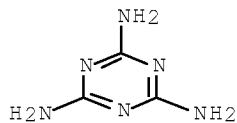
CMF C7 H12 O2



CM 6

CRN 108-78-1

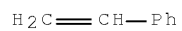
CMF C3 H6 N6



CM 7

CRN 100-42-5

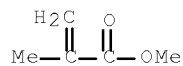
CMF C8 H8



CM 8

CRN 80-62-6

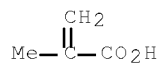
CMF C5 H8 O2



CM 9

CRN 79-41-4

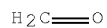
CMF C4 H6 O2



CM 10

CRN 50-00-0

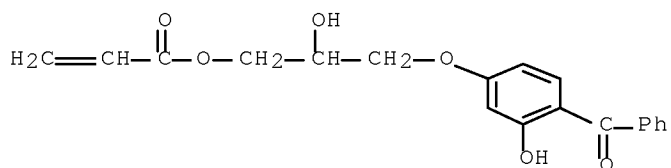
CMF C H2 O



RN 118864-24-7 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, polymer with
 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
 2-propenoate, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, methyl
 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX
 NAME)

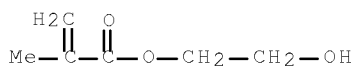
CM 1

CRN 1843-07-8
 CMF C19 H18 O6



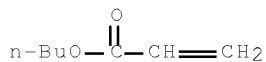
CM 2

CRN 868-77-9
 CMF C6 H10 O3



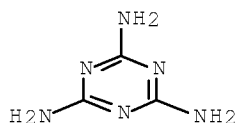
CM 3

CRN 141-32-2
 CMF C7 H12 O2



CM 4

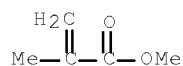
CRN 108-78-1
 CMF C3 H6 N6



CM 5

CRN 80-62-6

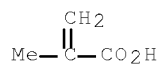
CMF C5 H8 O2



CM 6

CRN 79-41-4

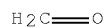
CMF C4 H6 O2



CM 7

CRN 50-00-0

CMF C H2 O

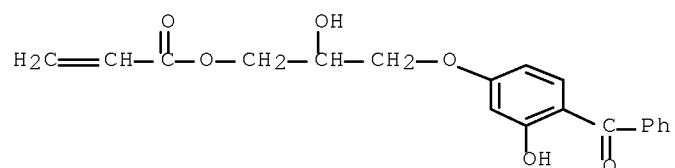


IT 1843-07-8

RL: USES (Uses)

(light stabilizers, for heat-curable coatings)

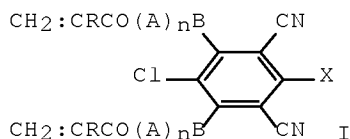
RN 1843-07-8 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester
(CA INDEX NAME)

L57 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1988:438402 HCAPLUS Full-text
 DOCUMENT NUMBER: 109:38402
 ORIGINAL REFERENCE NO.: 109:6517a,6520a
 TITLE: Radiation-curable isophthalonitrile derivatives
 INVENTOR(S): Ishikawa, Nobuo; Takaoka, Akio; Watanabe, Tomoyuki;
 Ikehara, Toyoji; Narita, Kichihei; Ito, Haruaki
 PATENT ASSIGNEE(S): SDS Biotech K. K., Japan; San Nopco Ltd.
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 62240655	A	19871021	JP 1986-84068	19860414
PRIORITY APPLN. INFO.: GI			JP 1986-84068	19860414



AB Isophthalonitrile derivs. I [R = H, Me; A = OCH₂CH₂, OCHMeCH₂, OCH₂CHOHCH₂; B = O, S; X = F, CH₂:CRCO(A)_nB; n = 0-4] polymerizable by radiation are prepared
 Thus, 4.3 g 5-chloro-2,4,6- trifluoroisophthalonitrile was treated with 7.2 g CH₂:CHCO₂H in the presence of 5.8 g KF and methylhydroquinone in MeCN at room temperature for 12 h to give 4.5 g I (X = F, R = H, B = O, n = 0) (II) with 95% purity in 68% yield. Then, II was mixed with 4.8% Darocur 1173 and 1.2% Ph₂CO, coated on a glass plate, then irradiated with UV to give a cured film showing pencil hardness 2H.

IT 115136-87-3F 115137-01-4F

RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of, radiation-cured)

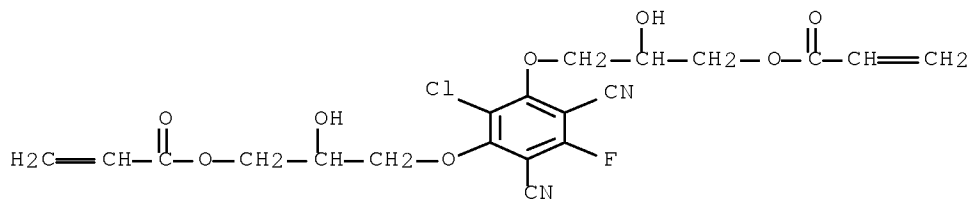
RN 115136-87-3 HCAPLUS

CN 2-Propenoic acid, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115136-86-2

CMF C20 H18 Cl F N2 O8



RN 115137-01-4 HCAPLUS

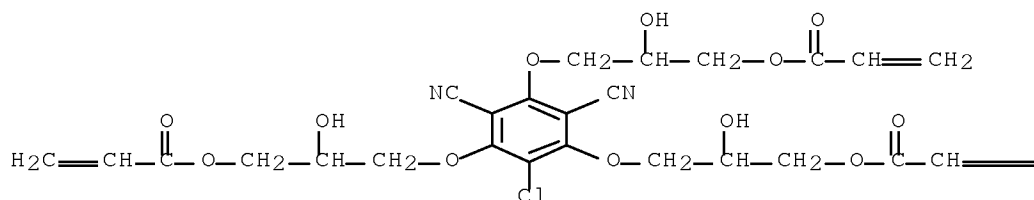
CN 2-Propenoic acid, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 115137-00-3

CMF C26 H27 Cl N2 O12

PAGE 1-A



PAGE 1-B

=CH_2

IT 115157-05-6P 115157-13-6P

RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, radiation-cured, abrasion- and water-resistant)

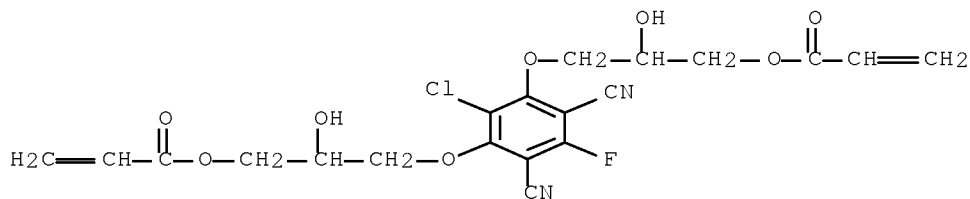
RN 115157-05-6 HCAPLUS

CN 2-Propenoic acid, (2-chloro-4,6-dicyano-5-fluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

CRN 115136-86-2

CMF C20 H18 Cl F N2 O8



CM 2

CRN 113066-13-0

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 115157-13-6 HCAPLUS

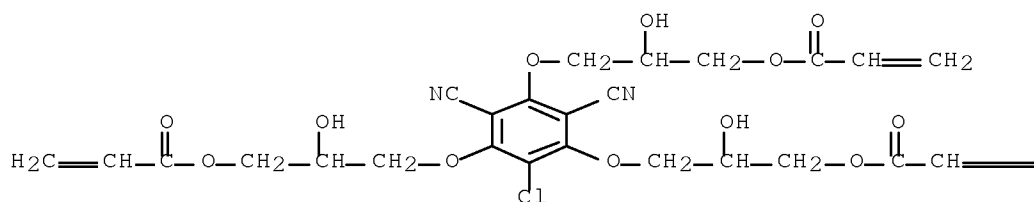
CN 2-Propenoic acid, (2-chloro-4,6-dicyano-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester, polymer with Photomer 6008 (9CI) (CA INDEX NAME)

CM 1

CRN 115137-00-3

CMF C26 H27 Cl N2 O12

PAGE 1-A



PAGE 1-B

=CH2

CM 2

CRN 113066-13-0

CMF Unspecified

CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L57 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1988:114315 HCAPLUS Full-text

DOCUMENT NUMBER: 108:114315

ORIGINAL REFERENCE NO.: 108:18729a,18732a

TITLE: Radiation-crosslinkable fluorine-containing aromatic dinitrile compounds

INVENTOR(S): Ishikawa, Nobuo; Takaoka, Akio; Watanabe, Tomoyuki; Ikehara, Toyoji; Narita, Kichihei

PATENT ASSIGNEE(S): SDS Biotech Corp., Japan; San Nopco Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

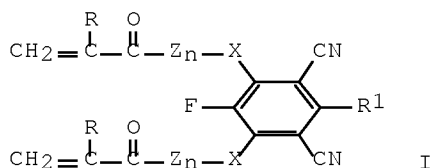
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62167751	A	19870724	JP 1986-8923	19860121
JP 06000736	B	19940105		
PRIORITY APPLN. INFO.: GI			JP 1986-8923	19860121



AB Title compds., useful in solvent-free coatings, inks, and adhesives with good water and abrasion-resistance, comprise I (R = H, Me; Z = OCH₂CH₂, OCHMeCH₂, OCH₂CHOHCH₂; X = O, S; R = F, CH₂:(RCOZX; n = 0-4). Tetrafluoroisophthalonitrile 4.0, acrylic acid 7.2, KF 5.8, and methylhydroquinone 0.008 g were mixed in MeCN at room temperature for 12 h to give 4.14 g 2,5-difluoro-4,6-bis(acryloyloxy)isophthalonitrile (II). II 100, 2-hydroxy-2-methyl-1-phenylpropan-1-one 4.8 and benzophenone 1.2%, were coated onto glass plate, and irradiated with UV-light to give a coating with pencil hardness 2H whereas coating from triethylene glycol diacrylate needed twice the irradiation time. for the same hardness.

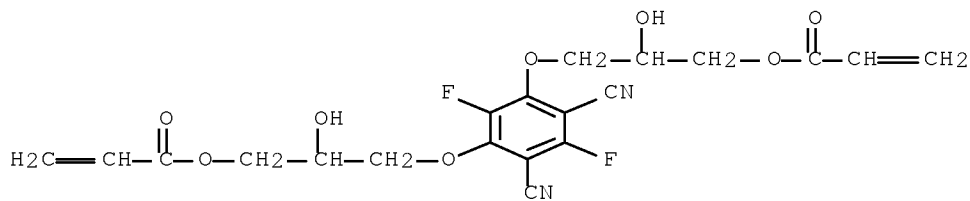
IT 112756-39-5 112756-41-9

RL: USES (Uses)

(coatings containing, UV-curable, solvent-free)

RN 112756-39-5 HCAPLUS

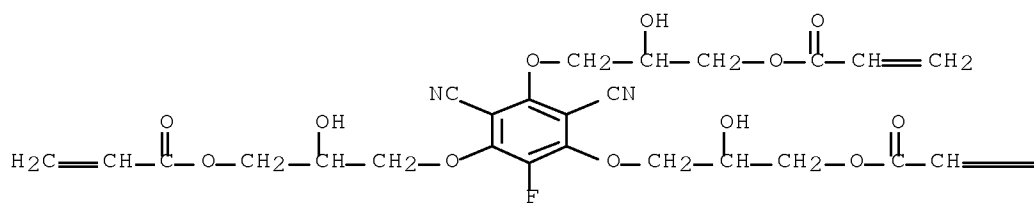
CN 2-Propenoic acid, (4,6-dicyano-2,5-difluoro-1,3-phenylene)bis[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)



RN 112756-41-9 HCAPLUS

CN 2-Propenoic acid, (2,4-dicyano-6-fluoro-1,3,5-benzenetriyl)tris[oxy(2-hydroxy-3,1-propanediyl)] ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

=CH₂

L57 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:606278 HCAPLUS Full-text

DOCUMENT NUMBER: 93:206278

ORIGINAL REFERENCE NO.: 93:32919a,32922a

TITLE: Thermosetting vinyl copolymer coating compositions

PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 55075459	A	19800606	JP 1978-149063	19781204
JP 61042751	B	19860924		
PRIORITY APPLN. INFO.:			JP 1978-149063	A 19781204

AB Ph2CO derivative-containing acrylic polymers are aging-resistant topcoats in 2-coat-1-bake coating of automobiles. Thus, xylene 85, BuOH 15, styrene 15, Bu methacrylate 46, 2-ethylhexyl methacrylate 20, hydroxyethyl methacrylate 13, methacrylic acid 2, 2-hydroxy-4-[2-hydroxy-3-(methacryloxy)propoxy]benzophenone 4, and AIBN 3 parts were heated 8 h at 80° with addition of 0.2 part AIBN at 2-h intervals to give a polymer [75454-34-1] solution containing 50% solids, mixed (140 parts) with 60 parts 50% butylated melamine resin and 0.01 part silicone leveling agent to give a topcoat with better appearance, durable gloss, and weather resistance than with a monomeric UV absorber.

IT 75460-40-1

RL: TEM (Technical or engineered material use); USES (Uses)
(coatings, weather-resistant, for automobiles)

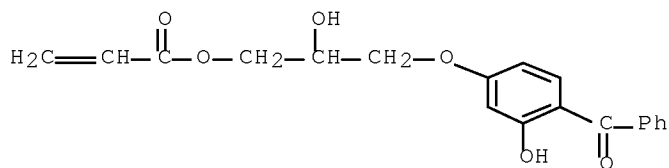
RN 75460-40-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with
3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, butyl
2-methyl-2-propenoate, butyl 2-propenoate, 2-ethylhexyl
2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl
2-methyl-2-propenoate and (1-methylethenyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8

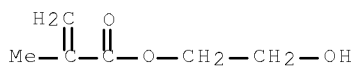
CMF C19 H18 O6



CM 2

CRN 868-77-9

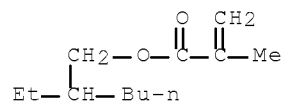
CMF C6 H10 O3



CM 3

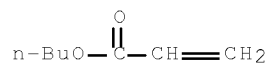
CRN 688-84-6

CMF C12 H22 O2



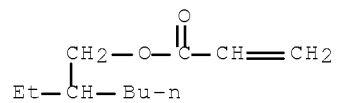
CM 4

CRN 141-32-2
CMF C7 H12 O2



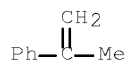
CM 5

CRN 103-11-7
CMF C11 H20 O2



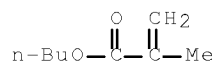
CM 6

CRN 98-83-9
CMF C9 H10

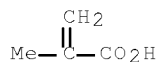


CM 7

CRN 97-88-1
CMF C8 H14 O2



CM 8

CRN 79-41-4
CMF C4 H6 O2

L57 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1980:551149 HCAPLUS Full-text
 DOCUMENT NUMBER: 93:151149
 ORIGINAL REFERENCE NO.: 93:24101a,24104a
 TITLE: Acrylic copolymers bearing N-heterocyclic side rings
 and their use
 INVENTOR(S): Karrer, Friedrich
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
 SOURCE: Eur. Pat. Appl., 35 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 10518	A1	19800430	EP 1979-810119	19791008
R: CH, DE, FR, GB, IT				
US 4276401	A	19810630	US 1979-82392	19791005
CA 1133485	A1	19821012	CA 1979-337405	19791011
JP 55054312	A	19800421	JP 1979-132363	19791013
PRIORITY APPLN. INFO.:			CH 1978-10647	A 19781013

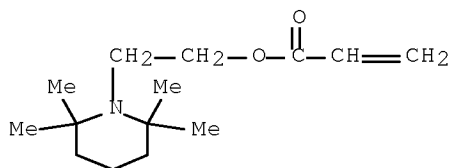
AB Acrylic polymers containing piperidine, benzophenone, benzotriazole, piperidinespirohydantoin and other stabilizer-type groups as substituents are prepared for use as light stabilizers which have high compatibility with other polymers and excellent migration resistance. Thus, 16.3 g 2-[2-hydroxy-3-(acrylamidomethyl)-5-tert-octylphenyl]benzotriazole and 13.5 g 4-(acryloyloxy)-1,2,2,6,6-pentamethylpiperidine in 120 mL benzene were heated to 77-8°, treated with 0.15 g AIBN in benzene, polymerized 16 h at 77-8°, treated with an addnl. 0.15 g AIBN in benzene, and polymerized 24 h at 77-8°, giving a copolymer [74945-51-0] with softening point 145° and number average mol. weight 31,600.

IT ~~74945-33-8P~~
 RL: PREP (Preparation)
 (manufacture of, as light stabilizer)

RN 74945-33-8 HCAPLUS
 CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester, polymer with 2-(2,2,6,6-tetramethyl-1-piperidinyl)ethyl 2-propenoate (9CI)
 (CA INDEX NAME)

CM 1

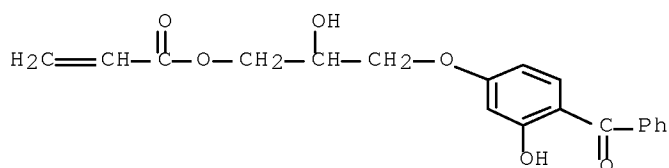
CRN 70195-48-1
CMF C14 H25 N O2



CM 2

CRN 1843-07-8

CMF C19 H18 O6



L57 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1980:164674 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 92:164674

ORIGINAL REFERENCE NO.: 92:26705a,26708a

TITLE: Cumulative and synergistic effects in photooxidative stabilization of low density polyethylene

AUTHOR(S): Tincul, Ioan; Variu, Cornelia; Laiber, Magdalena; Cotovanu, Maria; Boborodea, Carmen

CORPORATE SOURCE: Inst. Cent. Chim., Minist. Ind. Chim., Bucharest, 12-202, Rom.

SOURCE: Materiale Plastice (Bucharest, Romania) (1979), 16(4), 226-9

CODEN: MPLAAM; ISSN: 0025-5289

DOCUMENT TYPE: Journal

LANGUAGE: Romanian

AB Dilauryl thiodipropionate (I) [123-28-4]-pentaerythritol tetrakis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate] (II) [6683-19-8] mixts. showed better antioxidant properties in low-d. polyethylene (III) [9002-88-4] compns. than did similar mixts. of I with 2,6-di-tert-butyl-p-cresol [128-37-0], octadecyl 3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate [2082-79-3], or 1,1,3-tris(5-tert-butyl-4-hydroxy-2-methylphenyl)butane [1843-03-4]. The photooxidn. resistance of III containing I-II mixts. was enhanced by addition of mixts. of UV light absorbers, 4-(3-acryloyloxy-2-hydroxypropoxy)-2-hydroxybenzophenone [1843-07-8] and (n-butylamine)[2,2'-thiobis(4-tert-octylphenoxy)]nickel [14516-71-3], optimally at a ratio of 1:4.

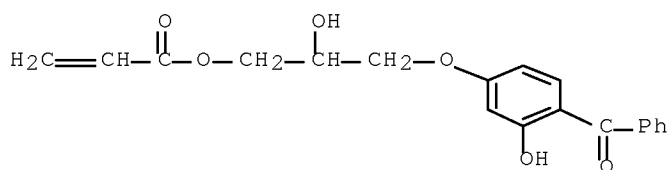
IT 1843-07-8

RL: USES (Uses)

(stabilization of polyethylene with antioxidants and, synergism in)

RN 1843-07-8 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester
(CA INDEX NAME)



L57 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1978:511169 HCAPLUS Full-text

DOCUMENT NUMBER: 89:111169

ORIGINAL REFERENCE NO.: 89:17167a, 17170a

TITLE: Stabilizing polyolefins against ultraviolet radiation

INVENTOR(S): Aslan, Vintila; Munteanu, Dan; Variu, Cornelia; Turcu, Sonia; Badea, Vasilica; Boncea, Gheorghe; Necsesu, Rada; Toader, Marina

PATENT ASSIGNEE(S): Combinatul Petrochimic Pitesti, Rom.

SOURCE: Rom., 4 pp.

CODEN: RUXXA3

DOCUMENT TYPE: Patent

LANGUAGE: Romanian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
RO 60611	A2	19760915	RO 1973-73535	19730118
PRIORITY APPLN. INFO.:			RO 1973-73535	A 19730118

AB Polyethylene (I), polypropylene, poly(methylpentene), and ethylene-vinyl acetate copolymer were grafted in the presence of radical initiators and 0.001-20% monomer containing an UV-absorbing group and a polymerizable double bond [such as 4-(3-acryloyloxy-2-hydroxypropoxy)-2-hydroxybenzophenone (II) or 4-acryloyloxy-2-hydroxybenzophenone] to give graft copolymers with increased resistance to UV light. Thus, 90 parts I was graft polymerized at 140° with 10 parts II in presence of 2.5% (based on weight II) lauroyl peroxide.

IT ~~67185-05-1~~ ~~67185-82-4~~ ~~67185-84-6~~

RL: USES (Uses)

(graft, UV-resistant)

RN 67185-05-1 HCAPLUS

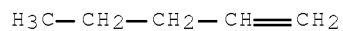
CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester, polymer with methyl-1-pentene (9CI) (CA INDEX NAME)

CM 1

CRN 30285-07-5

CMF C6 H12

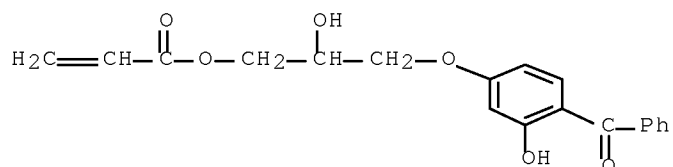
CCI IDS



CM 2

CRN 1843-07-8

CMF C19 H18 O6



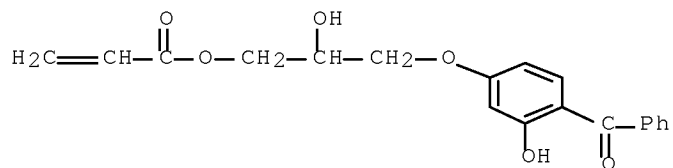
RN 67185-82-4 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester,
polymer with ethene (9CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8

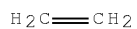
CMF C19 H18 O6



CM 2

CRN 74-85-1

CMF C2 H4

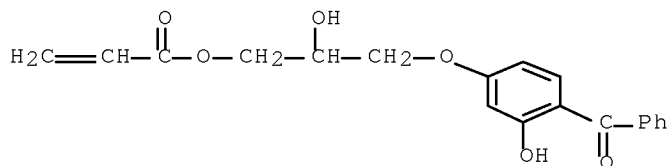


RN 67185-84-6 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester,
polymer with ethene and ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8
CMF C19 H18 O6



CM 2

CRN 108-05-4
CMF C4 H6 O2



CM 3

CRN 74-85-1
CMF C2 H4



L57 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1977:107484 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 86:107484

ORIGINAL REFERENCE NO.: 86:16973a,16976a

TITLE: Pressure-sensitive adhesives using interpolymers of acrylates, oxypropyl acrylamides and acrylic acid

INVENTOR(S): Mowdood, Syed K.; Given, David A.

PATENT ASSIGNEE(S): Goodyear Tire and Rubber Co., USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 3998997	A	19761221	US 1975-553358	19750226
PRIORITY APPLN. INFO.:			US 1975-553358	19750226

AB One-component, multimonomer pressure-sensitive adhesives based on acrylic monomers were prepared in which tackiness and shear were varied by choice of

monomers. Thus, acrylic acid 2.0, diacetone acrylamide 3.0, ethyl acrylate 38.1, ethylene glycol dimethacrylate 0.04, 2-ethylhexyl acrylate 56.1, hydroxypropylmethacrylate 0.76, azobisisobutyronitrile 0.3, EtOAc 100.0, and hexane 20.0 parts were polymerized at 138° to give 45% solids copolymer [61837-86-3] adhesive.

IT 61837-90-9

RL: USES (Uses)

(pressure-sensitive adhesives based on)

RN 61837-90-9 HCAPLUS

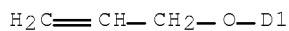
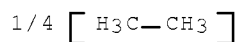
CN 2-Butenedioic acid (2Z)-, monomethyl ester, polymer with 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethyl 2-propenoate, oxiranylmethyl 2-propenoate and tetrakis(2-propenyloxy)ethane (9CI) (CA INDEX NAME)

CM 1

CRN 29895-12-3

CMF C14 H22 O4

CCI IDS

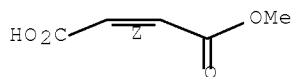


CM 2

CRN 3052-50-4

CMF C5 H6 O4

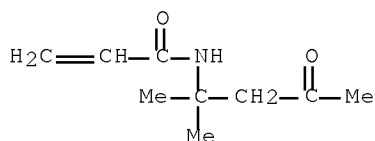
Double bond geometry as shown.



CM 3

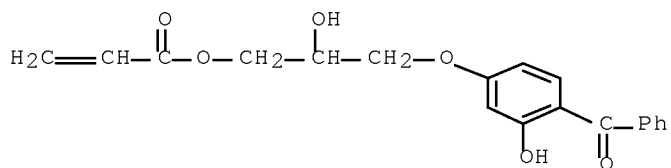
CRN 2873-97-4

CMF C9 H15 N O2



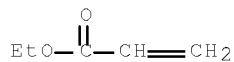
CM 4

CRN 1843-07-8
 CMF C19 H18 O6



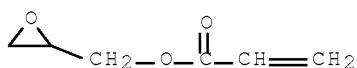
CM 5

CRN 140-88-5
 CMF C5 H8 O2



CM 6

CRN 106-90-1
 CMF C6 H8 O3



L57 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1974:134292 HCAPLUS Full-text
 DOCUMENT NUMBER: 80:134292
 ORIGINAL REFERENCE NO.: 80:21665a,21668a
 TITLE: Polymer resin composition
 INVENTOR(S): Suzuki, Kisaburo; Iyama, Akihito; Tanaka, Yoshitaka;
 Yukutomi, Masuo
 PATENT ASSIGNEE(S): Kyoto Pharmaceutical Industries, Ltd.
 SOURCE: Jpn. Tokkyo Koho, 8 pp.
 CODEN: JAXXAD
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

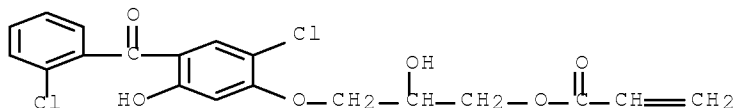
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 48019861	B	19730616	JP 1969-40378	19690524
PRIORITY APPLN. INFO.:			JP 1969-40378	19690524

AB Mixing of a benzophenone compound (I) with PVC [9002-86-2], polypropylene [9003-07-0], or ethylene-vinyl acetate copolymer [24937-78-8] resin improved the stability of the resins to uv degradation. Thus, a mixture containing PVC 100, dioctyl phthalate 50, a Cd-Ba stabilizer 1.5, Cd stearate 0.6 Ba stearate 0.2, and I(R = R3 = H, R1 = Cl, R2 = CH2Ph) 0.2 part was rolled 5 min at 160.deg., to give a 0.3-mm film, transmittance at 450 mμ 90.0% after exposure to uv irradiation for 1500 hr, compared to 10.5% for a film prepared without I and 50.9% for a film containing 4'-chloro-2-hydroxy-4-methoxybenzophenone. I(R = H, Cl, tert-Bu; R1 = Cl, tert-Bu, Et; R2 = H, C8H17, CH2CH2OH, CH2CH(OH)CH2O2CCH:CH2, C12H25, CH2CO2H, CH2CO2CH2Ph, COCH:CHCO2H, COCH2CH2CO2H; R3 = H, tert-Bu) were used similarly.

IT 52551-96-9
 RL: USES (Uses)
 (uv absorbers, for plastics)

RN 52551-96-9 HCAPLUS

CN 2-Propenoic acid, 3-[2-chloro-4-(2-chlorobenzoyl)-5-hydroxyphenoxy]-2-hydroxypropyl ester (CA INDEX NAME)



L57 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1970:82912 HCAPLUS Full-text

DOCUMENT NUMBER: 72:82912

ORIGINAL REFERENCE NO.: 72:15115a,15118a

TITLE: Suntan formulations

PATENT ASSIGNEE(S): National Starch and Chemical Corp.

SOURCE: Brit., 16 pp.
 CODEN: BRXXAA

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 1177797		19700114	GB 1967-12208	19670315
US 3529055		19700915	US	19660318
PRIORITY APPLN. INFO.:			US	19660318

AB An alkali-soluble copolymer containing an ethylenically unsatd. derivative of phenyl salicylate, benzophenone, or benzotriazole and an ethylenically unsatd. carboxylic acid is formulated at >1% in an oil-in-H2O emulsion, an organic solvent solution, or a solid gel, to give a suntan composition that absorbs uv radiation, causing sunburn while transmitting uv radiation causing tanning of the skin. Thus, a 5:4:1 mixture of 2-hydroxy-3-(2-hydroxybenzyloxy)propyl methacrylate, β-hydroxypropyl acrylate, and acrylic

acid was refluxed at 83° for 6 hr in the presence of a free-radical catalyst to give a terpolymer which was dissolved in iso-PrOH to give a 50%-solids solution. The solution 1.4 was diluted with EtOH 23.6 and iso-Pr myristate 3, phenylmethylpolysiloxane 1, and glycerol 1 part and a trace of perfume was added to give a suntan formulation that was not removed by fresh salt water, but was readily removed by soap and water. Other copolymers used contained 2-hydroxy-3-(2-hydroxyphenoxy)propylacrylate, β -hydroxyethyl acrylate, methacrylic acid, Et acrylate, Ph 2-hydroxy-5-(methacryloxymethyl)benzoate, Bu acrylate, Ph 2-hydroxy-5-(acryloxymethyl)benzoate, itaconic acid, the 4-(3-methacryloxy-2-hydroxypropyl) ether of 2,4-dihydroxybenzo-phenone, vinyl acetate, Et H maleate, the 4-(3-acryloxy-2-hydroxypropyl) ether of 2-(2,4-dihydroxyphenyl)benzotriazole, Bu H fumarate, and the 3-(3-methacryloxy-2-hydroxypropyl) ether of 2-(2,3-dihydroxyphenyl)benzotriazole. Other suntan formulations contained acetylated lanolin, stearic acid, beeswax, mineral oil, a water- and alc.-soluble lanolin derivative, butylated hydroxyanisole, and NH₄OH.

IT 27322-99-2, uses and miscellaneous

RL: BIOL (Biological study)
(suntan lotions)

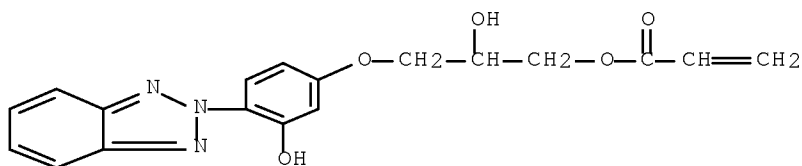
RN 27322-99-2 HCAPLUS

CN Maleic acid, monoethyl ester, polymer with
3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl acrylate and
vinyl acetate (8CI) (CA INDEX NAME)

CM 1

CRN 25177-21-3

CMF C18 H17 N3 O5

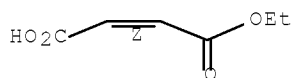


CM 2

CRN 3990-03-2

CMF C6 H8 O4

Double bond geometry as shown.



CM 3

CRN 108-05-4

CMF C4 H6 O2

AcO—CH=CH₂

L57 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1969:424699 HCAPLUS Full-text

DOCUMENT NUMBER: 71:24699

ORIGINAL REFERENCE NO.: 71:4585a,4588a

TITLE: Hair sprays containing ultraviolet-absorbing copolymers

INVENTOR(S): Skoultchi, Martin; Koehler, Frank T., Jr.

PATENT ASSIGNEE(S): National Starch and Chemical Corp.

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3445566	A	19690520	US 1966-535340	19660318
GB 1177796	A	19700114	GB 1967-1177796	19670315
PRIORITY APPLN. INFO.:			US 1966-535340	A 19660318

AB The title compds. do not yellow on aging, protect dyes from discoloring, are compatible with aerosol propellants, form clear glossy films which are soft and flexible, and can readily be removed from the hair with water. Thus, a 5:20:30:20:25 2-hydroxy-4-(3-methacryloxy - 2 - hydroxypropoxy)benzophenone-acrylic acid-Me acrylate-Me methacrylate-hydroxypropyl acrylate copolymer was prepared in the form of an alc. lacquer containing 41% of resin solids. The copolymer lacquer (7.3 parts) was mixed with 22.7 parts anhydrous alc., placed in an aerosol can, and 70 parts of a 60:40 mixture of CCl₃F and CCl₂F₂ added.

IT 25104-39-6, uses and miscellaneous 25135-70-0, uses and miscellaneous 25135-71-1, uses and miscellaneous

RL: BIOL (Biological study)

(as ultraviolet light-absorbing binder, in hair sprays)

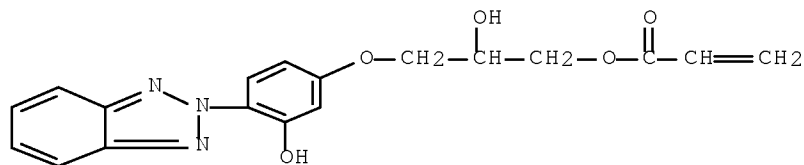
RN 25104-39-6 HCAPLUS

CN Crotonic acid, polymer with 3-[4-(2H-benzotriazol-2-yl)-3-hydroxyphenoxy]-2-hydroxypropyl acrylate and vinyl acetate (8CI) (CA INDEX NAME)

CM 1

CRN 25177-21-3

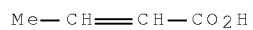
CMF C18 H17 N3 O5



CM 2

CRN 3724-65-0

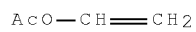
CMF C4 H6 O2



CM 3

CRN 108-05-4

CMF C4 H6 O2



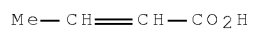
RN 25135-70-0 HCAPLUS

CN Crotonic acid, polymer with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone
3-acrylate and vinyl acetate (8CI) (CA INDEX NAME)

CM 1

CRN 3724-65-0

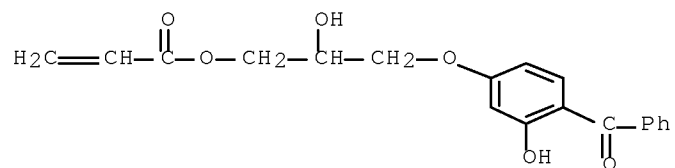
CMF C4 H6 O2



CM 2

CRN 1843-07-8

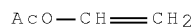
CMF C19 H18 O6



CM 3

CRN 108-05-4

CMF C4 H6 O2



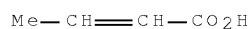
RN 25135-71-1 HCAPLUS

CN Crotonic acid, polymer with 4-(2,3-dihydroxypropoxy)-2,2'-
dihydroxybenzophenone 3-acrylate and vinyl acetate (8CI) (CA INDEX NAME)

CM 1

CRN 3724-65-0

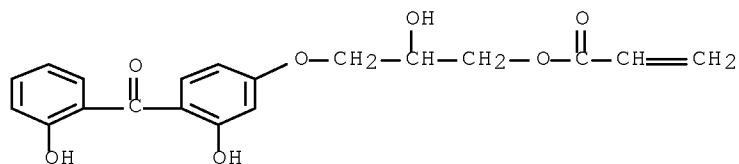
CMF C4 H6 O2



CM 2

CRN 1823-19-4

CMF C19 H18 O7



CM 3

CRN 108-05-4

CMF C4 H6 O2



L57 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1967:500657 HCAPLUS Full-text

DOCUMENT NUMBER: 67:100657

ORIGINAL REFERENCE NO.: 67:18979a,18982a

TITLE: Polymers resistant to ultraviolet light degradation

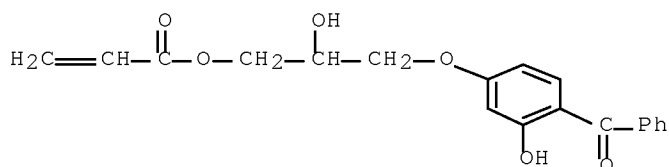
INVENTOR(S): Fertig, Joseph; Skoultchi, Martin; Goldberg, Albert I.

PATENT ASSIGNEE(S): National Starch and Chemical Corp.

SOURCE: U.S., 4 pp.

CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

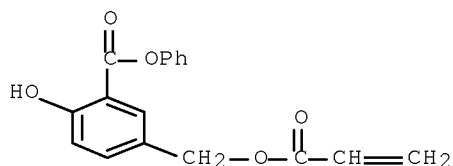
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	US 3340231		19670905	US 1964-407236	19641028
GI	For diagram(s), see printed CA Issue.				
AB	Continuation-in-part of U.S. 3,173,893 (CA 63: 1951g). A mixture of 4-(3-acryloyloxy - 2 - hydroxypropoxy) - 2 - hydroxybenzophenone (I) 100.0, tetrahydrofuran 200.0, and Bz2O2 0.5 part was refluxed for 8 hrs. to give a lacquer containing 30% solids, which was diluted to 5% solids with EtOAc and used to prepare a 3-mil film on a 1.5-mil film of a 90:10 vinylidene chloride-Et acrylate copolymer (II). The resulting laminate was exposed to the equivalent of 14 hrs. of sunlight from a Hg-vapor lamp. The Photovolt Reflectometer reading increased (compared with the reading before exposure to uv light) by 3.0, while the reading increased by 35.5 for a control film of II. Polymers of 4-(3-methacryloyloxy-2-hydroxypropyl)-2-hydroxybenzophenone, 4-(3-acryloyloxy - 2 - hydroxypropyl) - 2,2' - dihydroxybenzophenone, 4-(3-allyloxy-2-hydroxypropyl)-2-hydroxybenzophenone, and 4-(2-hydroxy-3-buten-1-oxy)-2-hydroxybenzophenone were similarly prepared and used as uv light absorbers for II films.				
IT	30921-66-5 RL: USES (Uses) (as ultraviolet light stabilizers for vinyl compound polymers)				
RN	30921-66-5 HCAPLUS				
CN	Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone, polymers (8CI) (CA INDEX NAME)				
CM	1				
CRN	1843-07-8				
CMF	C19 H18 O6				



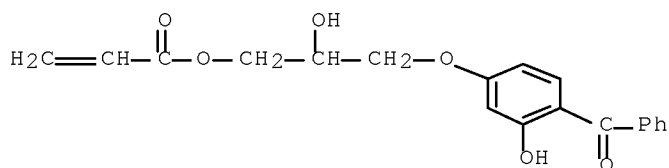
L57 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1967:464986 HCAPLUS Full-text
 DOCUMENT NUMBER: 67:64986
 ORIGINAL REFERENCE NO.: 67:12279a,12282a
 TITLE: Ultraviolet light-absorbing copolymers of acryloxymethyl benzoates and dihydroxybenzophenone derivatives
 INVENTOR(S): Fertig, Joseph; Goldberg, Albert I.; Skoultchi, Martin
 PATENT ASSIGNEE(S): National Starch and Chemical Corp.
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	US 3328491		19670627	US 1964-364322	19640501
AB	Copolymers of Ph 2-hydroxy-5-acryloxymethylbenzoate or Ph 2-hydroxy-5-methacryloxymethylbenzoate (I) and 2-hydroxy-4-(2-hydroxy-3-acryloxypropyl)benzophenone or 2-hydroxy-4-(2-hydroxy-3-methacryloxypropyl)benzophenone (II) were used as uv light absorbers in polymeric material. Thus, a mixture of I 12.5, II 12.5, Me2CO 75, and Bz2O2 0.125 part was refluxed for 8 hrs. at 56° and the resulting solution was treated with MeOH to precipitate 17 parts I-II copolymer. This product was dissolved in tetrahydrofuran, the solution was blended with a 30 weight % solution of a 90:10 vinyl chloride-Et acrylate copolymer in tetrahydrofuran, and the mixture was cast into a film on a sheet of white paper. After exposure for 140 hrs. to uv radiation, the film was less discolored than a film containing no I-II copolymer.				
IT	30679-09-5P RL: PREP (Preparation) (manufacture of and uv stabilization of polymers by)				
RN	30679-09-5 HCAPLUS				
CN	2,5-Cresotic acid, α -hydroxy-, phenyl ester, 5-acrylate, polymer with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone 3-acrylate (8CI) (CA INDEX NAME)				
CM	1				
	CRN 2872-26-6 CMF C17 H14 O5				



CM 2
 CRN 1843-07-8
 CMF C19 H18 O6



L57 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1966:438327 HCAPLUS Full-text
 DOCUMENT NUMBER: 65:38327
 ORIGINAL REFERENCE NO.: 65:7108b-c
 TITLE: Unsaturated derivatives of dihydroxybenzophenones
 PATENT ASSIGNEE(S): National Starch and Chemical Corp.
 SOURCE: 27 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
NL 6409466		19660218	NL 1964-9466	19640817

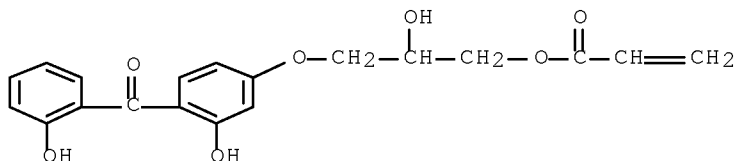
PRIORITY APPLN. INFO.: NL 19640817

AB Homopolymers of the title compds. (I) and copolymers, containing 0.1-5.0% I, have a better light stability without addition of uv-absorbing compds. I are: the 4-acryloxy- β -hydroxypropyl (II), the 4-methacryloxy- β -hydroxypropyl ether, the 4-(2-hydroxy)buten-1-yl ether, and the 4-(3-allyloxy-2-hydroxy)propyl ether of 2,4-dihydroxy-(III) and 2,2',4-trihydroxybenzophenone and the 4,4'-disubstituted (same as above compds.) derivs. of 2,2',4,4'-tetrahydroxybenzophenone. Thus, a mixture of 141.0 parts glycidyl acrylate, 214.0 parts III, and 2.8 parts Me₄NCl was heated 5 hrs. at 80-90°. After cooling 2.5% III was detected and 321 parts II (94%). Examples of copolymers with Me acrylate, styrene, vinylidene chloride, and vinyl chloride are given.

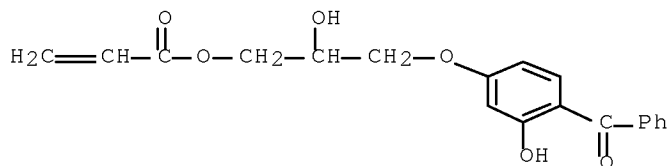
IT ~~1823-19-4F~~, Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone, polymers
~~1843-07-8F~~, Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone ~~2327-18-6F~~, Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone ~~30921-66-5F~~, Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone, polymers
 RL: PREP (Preparation)
 (preparation of)

RN ~~1823-19-4~~ HCAPLUS

CN 2-Propenoic acid, 2-hydroxy-3-[3-hydroxy-4-(2-hydroxybenzoyl)phenoxy]propyl ester (CA INDEX NAME)

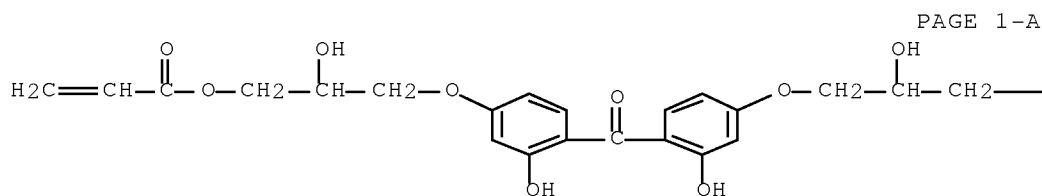


RN 1843-07-8 HCAPLUS
 CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester
 (CA INDEX NAME)



RN 2327-18-6 HCAPLUS

CN Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone (7CI, 8CI) (CA INDEX NAME)



PAGE 1-A



PAGE 1-B

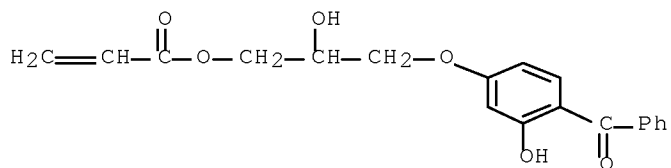
RN 30921-66-5 HCAPLUS

CN Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone, polymers (8CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8

CMF C19 H18 O6



L57 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1966:404549 HCAPLUS [Full-text](#)

DOCUMENT NUMBER: 65:4549

ORIGINAL REFERENCE NO.: 65:868a-d

TITLE: Ultraviolet-stabilizing monomers and polymers. II.
Synthesis and polymerization of acrylate and

AUTHOR(S): methacrylate derivatives of 2,4-dihydroxybenzophenone
Fertig, J.; Goldberg, A. I.; Skoultchi, M.
CORPORATE SOURCE: Natl. Starch & Chem. Corp., Plainfield, NJ
SOURCE: Journal of Applied Polymer Science (1966), 10(4),
663-72
CODEN: JAPNAB; ISSN: 0021-8995

DOCUMENT TYPE: Journal
LANGUAGE: English

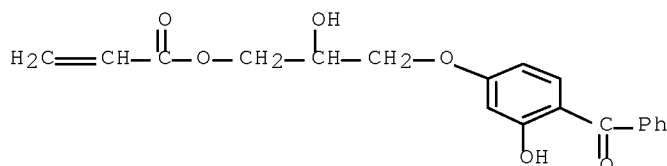
AB cf. CA 62, 10524f. In an effort to synthesize an ethylenically unsatd. uv absorber that could be copolymerized, thereby permanently incorporating a stabilizing moiety into a polymer, acrylate and methacrylate derivs. of 2,4-dihydroxybenzophenone (I) were prepared. I was heated with glycidyl acrylate or methacrylate in the presence of a salt catalyst to give 2-hydroxy-4-(3-acryloxy-2-hydroxypropoxy)benzophenone (II) or 2-hydroxy-4-(3-methacryloxy-2-hydroxypropoxyl)benzophenone (III). Homopolymers of II and III were obtained by polymerization in tetrahydrofuran, with azodiisobutyronitrile as initiator. The use of III polymer as a high-mol.-weight uv absorber was investigated by blending it in a 1% concentration with various polymers and copolymers. Films of these blends were exposed to uv and changes in mol. weight or insol. matter with exposure time were followed. Protection was obtained with poly(Me methacrylate), poly(vinyl chloride), poly(vinylidene chloride/acrylonitrile) (IV), and polystyrene (V). Since the III polymer was incompatible with IV and V, the II polymer was also screened, found to be compatible, and to be more effective as a stabilizer. III was copolymerized at the 1% level with styrene, vinyl acetate, vinyl chloride, and vinylidene chloride. On exposure to uv, some protection was achieved in all cases, and in the cases of styrene and vinylidene chloride, protection was significant.

IT 1843-07-8

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 1843-07-8 HCAPLUS

CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester
(CA INDEX NAME)



IT 30921-66-5, Acrylic acid, 3-ester with
4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone, polymers
(as ultraviolet light stabilizers for vinyl compound polymers)

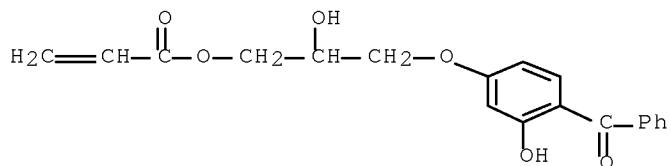
RN 30921-66-5 HCAPLUS

CN Acrylic acid, 3-ester with 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone,
polymers (8CI) (CA INDEX NAME)

CM 1

CRN 1843-07-8

CMF C19 H18 O6



L57 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1965:410868 HCAPLUS Full-text

DOCUMENT NUMBER: 63:10868

ORIGINAL REFERENCE NO.: 63:1951f-h,1952a

TITLE: Ultraviolet light-resistant polymers containing benzophenone derivatives

INVENTOR(S): Fertig, Joseph; Skoultchi, Martin; Goldberg, Albert I.

PATENT ASSIGNEE(S): National Starch and Chemical Corp.

SOURCE: 7 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3173893		19650316	US 1962-213577	19620731
GB 990312			GB	
PRIORITY APPLN. INFO.:			US	19620731

GI For diagram(s), see printed CA Issue.

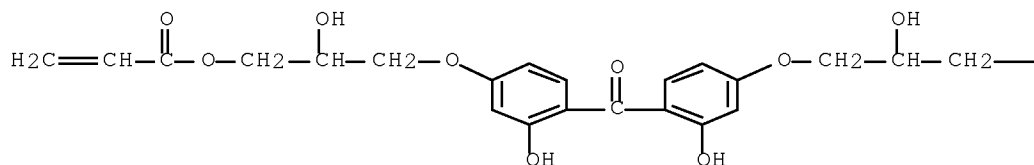
AB Copolymers with improved uv stability are prepared by including 0.1-5.0% of an ethylenically unsatd. 2,4-dihydroxybenzophenone monomer of the formula I or II, where R is H or OH and X is 3-acryloyloxy-2-hydroxypropyl, 3-methacryloyloxy-2-hydroxypropyl, (3-allyloxy-2-hydroxy)propyl, or 2-hydroxy-3buten-1-yl. For example, a mixture of Me acrylate 100, the 4-(3-acryloyloxy-2-hydroxypropyl) ether of 2,4-dihydroxybenzophenone (III) 1.0, EtOAc 150, and Bz2O2 0.5 part was refluxed at 78° for 6 hrs., and cooled. Dried 3-mil films of the lacquer containing 39.8% resin solids were exposed to the equivalent of 3 months of sunlight. Intrinsic viscosity measurements before and after exposure were 0.74 and 0.21 for the control and for the stabilized film 0.50 and 0.47. Copolymers of Et methacrylate with 1% 4-(3-methacryloyloxy-2-hydroxypropyl) ether of 2,4-dihydroxybenzophenone (IV), styrene with 0.5% II, 90:10:0.5 vinylidene chloride-Et acrylate-III, 90:10:1 vinylidene chloride-Bu acrylate-4-(3-acryloyloxy-2-hydroxypropyl) ether of 2,2',4-trihydroxybenzophenone, 75:25:0.25 vinylidene chloride-Bu acrylate-4,4'-bis(3-acryloyloxy-2-hydroxypropyl) ether of 2,2',4,4'-tetrahydroxybenzophenone, and 90:10:0.5 vinyl chloride-vinyl acetate-4-(3-allyloxy-2-hydroxypropyl) ether of 2,4-dihydroxybenzophenone all showed lower reflectometer readings than the controls after exposure. A homopolymer lacquer from I 100, EtOAc 200, and Bz2O2 0.5 part diluted to 5% in EtOAc used to coat a dry vinylidene chloride-Et acrylate copolymer film gave effective protection.

IT 2327-18-6, Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone (polymerization with vinyl compound, for light stabilization)

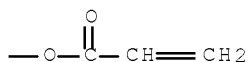
RN 2327-18-6 HCAPLUS

CN Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone (7CI, 8CI) (CA INDEX NAME)

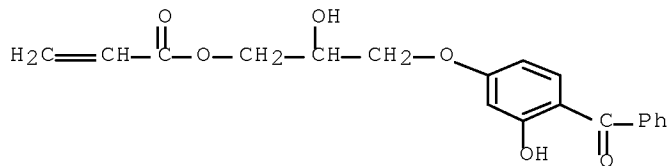
PAGE 1-A



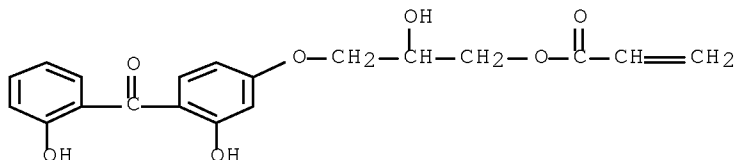
PAGE 1-B



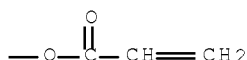
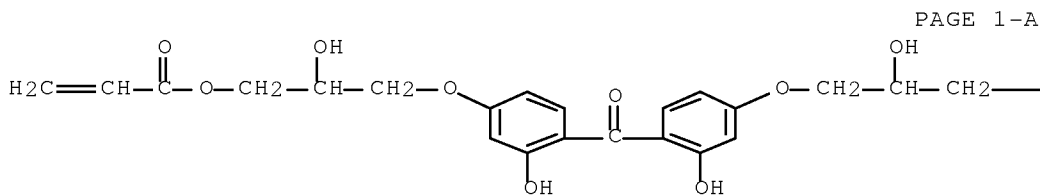
IT 1843-07-8, Acrylic acid, 3-ester with
 4-(2,3-dihydroxypropoxy)-2-hydroxybenzophenone
 (vinyl compound polymer polymerization with, for light stabilization)
 RN 1843-07-8 HCAPLUS
 CN 2-Propenoic acid, 3-(4-benzoyl-3-hydroxyphenoxy)-2-hydroxypropyl ester
 (CA INDEX NAME)



IT 1823-19-4, Acrylic acid, 3-ester with
 4-(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone 2327-18-6,
 Benzophenone, 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxy-,
 3,3'-diacrylate
 (vinyl compound polymerization with, for light stabilization)
 RN 1823-19-4 HCAPLUS
 CN 2-Propenoic acid, 2-hydroxy-3-[3-hydroxy-4-(2-
 hydroxybenzoyl)phenoxy]propyl ester (CA INDEX NAME)



RN 2327-18-6 HCAPLUS
 CN Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-
 dihydroxybenzophenone (7CI, 8CI) (CA INDEX NAME)



L57 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 1965:43719 HCAPLUS Full-text
 DOCUMENT NUMBER: 62:43719
 ORIGINAL REFERENCE NO.: 62:7693g-h
 TITLE: Oxidation of cyclic and aliphatic alcohols
 INVENTOR(S): Wineland, William H.
 PATENT ASSIGNEE(S): Dow Chemical Co.
 SOURCE: 2 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: Unavailable
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3165554		19650112	US 1962-212461	19620725

PRIORITY APPLN. INFO.: US 19620725

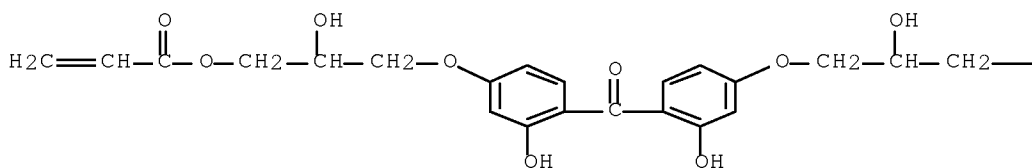
AB The title process was carried out by treating a secondary alc. with a halogen (Br or Cl) in the presence of a hydrogen halide acceptor in an aqueous medium at 0-100°. Thus, to a mixture of 400 g. cyclohexanol, 430 g. CaCO₃, and 1600 ml. H₂O charged to a flask at 57-60°, 145 g. Cl was added with vigorous stirring, at 0.58 g./min., and the mixture stirred an addnl. 0.5 hr. and steam-distilled to give 429 g. colorless oil containing (ir) 50% cyclohexanone and 50% cyclohexanol. Similarly, 2-octanol at 7-10° gave 90% 2-octanone; PhMeCHOH at 4-9° gave 93% PhAc; and 2-phenylcyclohexanol at 9-12° gave 90% 2-phenylcyclohexanone.

IT 2327-18-6
 (Derived from data in the 7th Collective Formula Index (1962-1966))

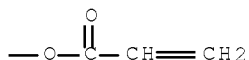
RN 2327-18-6 HCAPLUS

CN Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone (7CI, 8CI) (CA INDEX NAME)

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ACCESSION NUMBER: 1965:43718 HCAPLUS Full-text

DOCUMENT NUMBER: 62:43718

ORIGINAL REFERENCE NO.: 62:7693e-g

TITLE: Ethylenically unsaturated derivatives of
2,4-dihydroxybenzophenone

INVENTOR(S): Goldberg, Albert I.; Skoultchi, Martin; Fertig, Joseph

PATENT ASSIGNEE(S): National Starch and Chemical Corp.

SOURCE: 4 pp.

DOCUMENT TYPE: Patent

LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3162676		19641222	US 1962-202983	19620618
FR 1411903			FR	
PRIORITY APPLN. INFO.:			US	19620618

GI For diagram(s), see printed CA Issue.

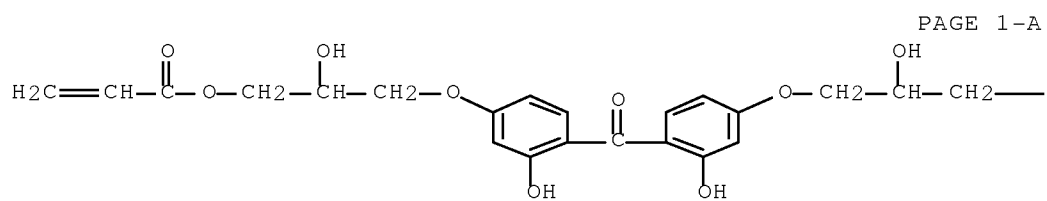
AB The title compds. (I) and (II), where X is 3-acryloyloxy-2-hydroxypropyl (HPA) and 3-methacryloyloxy-2-hydroxypropyl (HPMA) and R is H or OH, were prepared by treating 2,4-dihydroxy-(III), or 2,2',4-trihydroxy-(IV), or 2,2',4,4'-tetrahydroxybenzophenone (V) with either glycidyl acrylate (VI) or glycidyl methacrylate (VII). An agitated mixture of 141.0 parts VI, 214.0 parts III, and 2.8 parts tetramethylammonium chloride was heated at 80-90° 5 hrs. and cooled to 20° and the resulting viscous oil removed and titrated. About 2.5% III remained, which indicated a conversion of 94% or a yield of 321 parts I (R = H and X = HPA). Similarly was prepared 303 parts I, (R = H, X = HPMA) from 156 parts VII, 214.0. parts III, and 3.1 parts NaOH (85% conversion). Also prepared were the following compds.(type, X, R, and % conversion given): I, HPA, OH, 93; I, HPMA, OH, 88; II, HPA, OH, 92; and II, HPMA, OH, 82. I and II are useful for the preparation of homopolymers and for copolymers with vinyl type monomers. These copolymers are light-stabilized.

IT 2327-18-6

(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 2327-18-6 HCAPLUS

CN Acrylic acid, 3,3'-diester with 4,4'-bis(2,3-dihydroxypropoxy)-2,2'-dihydroxybenzophenone (7CI, 8CI) (CA INDEX NAME)



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